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Canada. Royal commission on energy.

Hearings. v. 49-51, 1958.

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Mr Deakin

ROYAL COMMISSION

ON

ENERGY

HEARINGS

HELD AT

TORONTO

ONT.

VOLUME No.: VOLUME 49 OF THE REPORTS OF THE COMMISSION **DATE:**

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ANGUS, STONEHOUSE & CO. LTD.
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ROYAL COMMISSION

ON

ENERGY

Hearings held at Toronto,
commencing Wednesday,
July 2, 1958, at 10.00 a.m.

PRESENT:

Mr. H. Borden, C.M.G., Q.C.	Chairman
Mr. J. L. Levesque	Member
Mr. G. E. Britnell	Member
Dr. R. D. Howland	Member
Mr. L. J. Ladner, Q.C.	Member
Dr. R. M. Hardy	Member

COMMISSION COUNSEL:

Mr. A. S. Pattillo, Q.C.

Mr. Miles H. Patterson

Mr. J. F. Parkinson	Secretary to the Commission
Major N. Lafrance	Assistant Secretary to the Commission



Saturday,
July 5, 1958.

--- On resuming at 10.00 a.m.

--- MR. COMMISSIONER LEVESQUE not present.

TRANS-CANADA PIPE LINES LIMITED

THE CHAIRMAN: Gentlemen, the Commission will now resume its hearings. Mr. Frawley?

MR. FRAWLEY: Thank you, Mr. Chairman. Mr. Coates, there is no regulation of the field price of gas in Alberta?

MR. COATES: No sir, not that I know of.

MR. FRAWLEY: And that is as it should be, isn't it?

MR. COATES: That is what I say, yes.

MR. FRAWLEY: That is what the producers want?

MR. COATES: Well, I really don't know. I assume that that is what they would like.

MR. FRAWLEY: I thought you realized they were on record as not wanting any government regulation of the field price.

MR. COATES: I have read no direct statements. I have read in news releases they would prefer not to have it.

MR. FRAWLEY: That is your general understanding of it?

MR. COATES: Yes, that is my general understanding.



MR. FRAWLEY: And, as a matter of fact, it is the position of the chief owner of natural gas in Alberta, isn't it?

MR. COATES: Yes sir, that is what I understand.

MR. FRAWLEY: And it is Trans-Canada's position too? You subscribe to it as a general principle?

MR. COATES: Yes.

MR. FRAWLEY: In that context let us look at what you are saying in this brief: on page 13 you say that Trans-Canada believes that there should be additional legislation providing for Federal control of rates, and then you say, "Extra provincial gas pipe lines perform a public utility function, and the consuming public, the gas-distributing utilities and the pipe line companies are entitled to assurance that pipe line rates will remain just, reasonable and non-discriminatory." I wondered when I read that why you had left us out? Why didn't you say anything about the producers when you were writing that sentence?

MR. COATES: It is not my belief that the producers should have regulation rates.

MR. FRAWLEY: Any control of rates could possibly affect the price of gas at the wellhead; isn't that possible?

MR. COATES: It may be possible. I don't

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Association of the American

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think it absolutely follows that it will happen.

MR. FRAWLEY: Perhaps I might ask you whether you mean the control of the transportation rate: I think someone called it the Mcf mile -- the charge per Mcf mile; is that what you want control of -- that rate -- or do you go further and say that there should be regulation of the price at which you sell the gas?

MR. COATES: Well, I think the two go together.

MR. FRAWLEY: Well then - - -

MR. COATES: You arrive at the rate you sell the gas at rather than the rate it costs to move it to the point at which it is going to be sold.

MR. FRAWLEY: That is right, but I want to know whether or not you think it is necessary that the regulation of rates should go beyond what you charge to move the gas from Alberta to Toronto; or do you want regulation of the price which you charge to your distributor at Toronto?

MR. COATES: What is the difference?

MR. FRAWLEY: Well, which do you want to have regulated?

MR. COATES: I say it is all one and the same.

MR. FRAWLEY: Well, you do want regulation of the price at which you sell the gas in Toronto

MR. COATES: I am not saying we want regulation



of that price. I am saying it is in the public interest to have control of rates.

MR. FRAWLEY: Yes, that is what you say, but I want to be quite certain as to how far that goes, and the rate regulation that you envisage here is the regulation of the price which you will charge to your distributor in Toronto or anywhere along the line?

MR. COATES: Well, you arrive at that by determining what it costs to move it from Alberta to the place where it is going to be sold. It is all one and the same. I cannot give you an answer.

MR. FRAWLEY: I think we are in agreement: what you are talking about is the regulation of the price you will get for your gas after you have moved it?

MR. COATES: Yes, sir.

MR. FRAWLEY: . . . to, let us say, Toronto, or something like that. What would be the purpose of that regulation? What would it achieve? What would it be for?

MR. COATES: It would provide a fair rate of return to the utility and still not allow the utility to earn a rate of return which would be exorbitant or far in excess of the interests of the public.

/ MR. FRAWLEY: Let me examine that: I think yesterday, on the questioning by Mr. Pattillo, you made some reference to submitting a sales contract

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to the new Federal Regulatory Board before it went into effect?

MR. COATES: No sir, I didn't say that.

MR. FRAWLEY: Well, what would be the relationship between your company and the Regulatory Board with regard to one of these sales contracts? What jurisdiction would they have over one of these sales contracts?

MR. COATES: I say I would envisage a company such as Canada, Alberta and Southern, Westcoast, or any other company that may be in that particular type of business, filing with this Regulatory Board a set of rate schedules that would provide an earning for the company, outlining all the company's costs as the company saw them. The Board would examine them and set a set of rates for each zone which would be applicable to all those who wished to buy gas in the zone, and that would be the effective rate, and all those who wished to contract for gas would pay that effective rate as long as it was effective, and it would not be necessary to go to the Board with this contract to ask their approval before it was put into effect.

MR. FRAWLEY: Then, there would be a right for a purchaser to go to the Board and complain about the schedule of rates?

MR. COATES: Absolutely.

MR. FRAWLEY: Let us take Consumers' Gas



Company: you would propose they should pay certain rates and they would look it over and go to the new Board and complain that your rates were too high?

MR. COATES: Yes, sir.

MR. FRAWLEY: And you envisage giving the Board power to direct the price be lowered?

MR. COATES: If the Board feels they should be lowered, yes.

MR. FRAWLEY: And you would immediately go back to the field and try to renegotiate your contracts in the field?

MR. COATES: No, sir.

MR. FRAWLEY: What would you do other than that?

MR. COATES: I don't think the Board would direct that the prices would be reduced unless this company was earning more than the allowed rate of return.

MR. FRAWLEY: What did the Metropolitan Life Insurance Company do when they found or thought or decided that you were paying too much in the field? Didn't they make you go back and renegotiate those contracts downward?

MR. COATES: There was no change in the price.

MR. FRAWLEY: What was that?

MR. COATES: There was no change in the purchase price from the producer.



MR. FRAWLEY: Well, there was an adverse adjustment put upon the producer?

MR. COATES: Only to do with the amount of gas taken; nothing to do with the purchase price.

MR. FRAWLEY: It wasn't very acceptable to the producers, was it?

MR. COATES: I don't know; they all agreed to it.

MR. FRAWLEY: Well, even Trans-Canada didn't like it very well.

MR. COATES: Well, whether we did or did not was beside the point.

MR. FRAWLEY: You had to do it -- it had to be done?

MR. COATES: Yes, sir.

MR. FRAWLEY: What I have a great fear of is that the same situation will come about if you put power in the hands of the Board to say the prices you are charging in Ontario are too high: I put it to you there is only one thing you can try to do, and that is to go back and hammer down the field prices?



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MR. COATES: Mr. Frawley, I do not know of any cases. There may be some, but I am not a lawyer, and so I do not know of the cases and I do not keep up with them, but in my memory I know of no instances where any gas transmission company has returned to the field company and asked him to reduce his price as a result of any action by the Federal Power Commission or any other regulatory body in the United States.

MR. FRAWLEY: Why run any risk of there being just a case, even a first one? Why have any such rate regulation or contract regulation, which is what I prefer to call it?

MR. COATES: I say it is in the public interests to do it.

MR. FRAWLEY: The public interests of the pipe line company?

MR. COATES: No, sir.

MR. FRAWLEY: The public interest of the consumer?

MR. COATES: Of the consuming public.

MR. FRAWLEY: Of the consuming public? Frankly, that is really what you are at the moment chiefly interested in?

MR. COATES: No, sir, it is not.

MR. FRAWLEY: That is the way I have read the brief.



MR. COATES: I think you read it wrong.

MR. FRAWLEY: I am very glad to have you tell me that. You left me out of that first paragraph, that is all. Now, you are telling me that I need have no alarm, because in your memory you know of no time when the Federal Power Commission required the re-negotiation of the well-head prices of gas to conform to a reduction which they made in the distributing price?

MR. COATES: No, sir, I did not say the Federal Power Commission. I said I knew of no gas transmission company who returned to the producer and asked for a reduction in rates from the producer because the Federal Power Commission may have reduced the rates which the transmission company could charge.

MR. FRAWLEY: You say that they took it out of their own hide?

MR. COATES: Yes, sir.

MR. FRAWLEY: We can't have that assurance, can we, in Alberta?

MR. COATES: I cannot tell you whether you can or not. It depends a good deal on how this law is written.

MR. FRAWLEY: We will just have to leave it that way, that that will be hanging over us? The regulatory Board, on the complaint of



the consumers gas company might direct him to reduce the price to the consumers gas company in this or that zone or for this or that gas, but you will say, "We cannot go back to Alberta producer and try to take it out of his hide".

MR. COATES: No, sir. I advocate that there should not be a regulation of prices at the well-head. I do not happen to be a seer enough to look far enough into the future to see what any Government body might do.

MR. FRAWLEY: When you advocate that there should not be any regulation of price at the well-head and, even if it is something that everybody wants, it is left to the law of supply and demand, you would not want it to turn out to be a case of locking the door and then opening the window and letting some Federal regulatory body destroy what we had all thought as the proper objective, would you?

MR. COATES: Would you repeat that?

MR. FRAWLEY: I simply put it to you - - I won't repeat that. It was more an observation than a question.

MR. COATES: I think it was too, and not calling for an answer.

MR. FRAWLEY: I realize, Mr. Coates, that you certainly have no objection to discussing this thing in season and out of season and on all occasions with anybody representing the Province



of Alberta.

MR. COATES: No, sir, I sure don't.

MR. FRAWLEY: You realize that you have to have a healthy state of affairs back in the field or you cannot have a successful enterprise anywhere along the line?

MR. COATES: It is most important that we have a successful and happy relationship with the Province of Alberta.

MR. FRAWLEY: Now, you have set out on page 17 a series of deductions to be used in arriving at the volume of gas available for export from Canada. At the top of page 17 you say:

"The first off-set or deduction should be the reserves deemed necessary by the producing Province to provide for future consumption within that Province."

I must confess that I may have misunderstood what you were saying yesterday to Mr. Pattillo about five years. Would you mind telling me what you proposed that that first off-set or deduction should consist of?

MR. COATES: I will make another attempt at the five years. I think it is generally understood that in order to avoid long term money for any utility operation that there be some assurance of a long term return so that money can be repaid plus the interest. In order



to do that it is necessary to have a supply. It is generally the practice in this business to estimate your twenty year requirement on the basis of the fifth year amount of gas you would be selling, and that that amount of gas must be under contract in order for you to go along with that money. That is the fifth year - - that amount of gas to stay under contract to that company all the way through the life of the permit or through the life of the bonds. Any expected growth beyond that five years would depend upon the trend of development. That is, the company would have to have some faith in the fact that there is going to be additional development and that beyond the five years, if you are going to grow, you have to obtain additional gas for the quantity required beyond the five year period. So what I have tried to say on several occasions is that the fifth year quantity must be under contract for a long period of time and must be assured to whoever is using it - - forget Trans-Canada for a minute - - whoever it may be. The future growth beyond the five year period depends on the trend of development. That includes Alberta too, as far as I am concerned.

MR. FRAWLEY: What I was concerned about was this. You said yesterday that it had been suggested or determined that Alberta should



have thirty years supply before any gas leaves the Province - - should have an assurance that the supply is for thirty years before any gas leaves the Province. I do not know whether that has been modified.

MR. COATES: I believe it has been modified. In my first contact with the Province of Alberta, in the first application to take gas out of the Province, the requirement was that there be on hand in Alberta proved producible gas that will meet the thirty year projection, and no gas was to be taken out of the Province except until after that thirty year quantity was available to the Province.

MR. FRAWLEY: Yes.

MR. COATES: I believe that the present policy in Alberta is that they depend somewhat on the trend of development also.



MR. FRAWLEY: Yes. Now, however, all I am concerned about is, you are not suggesting, or are you, that the determination of that figure should be the subject of any federal regulation?

MR. COATES: No, sir, I am not saying that it should be subject to federal regulation. I think that is the figure that Alberta should determine.

MR. FRAWLEY: Or any other producing-province?

MR. COATES: Yes, or any other producing-province.

MR. FRAWLEY: And then you come up with this statement under paragraph 5, on page 17:

"The quantity of reserves remaining after
"the preceding deductions should be used
"as a basis for determining quantities of
"gas available for export."

Now, in a practical sense, what gas would that be, in your view, for a competing exporter, a competitor of Trans-Canada for export?

MR. COATES: Are you asking the quantity which would be available?

MR. FRAWLEY: Yes. I don't mean in trillions of cubic feet, but what has to be assured before there can be any export by a competing exporter?

MR. COATES: We said it would have to be determined in our case. You would have to



determine how much gas is required for the province. Whatever the figure may be or whatever the policy may be in the province, it is up to them to decide that figure. We said there should be gas available for use in Canada on the same kind of basis as far as other places are concerned. We said -- and this is certainly Trans-Canada's feeling -- that, inasmuch as it made a contract to sell gas in the United States, that should have some priority. Then, any other gas available in the province should be available for export to whoever can buy and to whoever can get the permit.

MR. FRAWLEY: And that would be gas that, practically speaking, has yet to be discovered?

MR. COATES: Well, that is our contention, to some extent.

MR. FRAWLEY: So you say Trans-Canada has to be taken care of, and Trans-Canada's demands now exceed the visible reserves, do they not?

MR. COATES: No, sir, I believe you are wrong. If you are talking about 1988, yes.

MR. FRAWLEY: I am talking about the figures you put in in Calgary of something of the order of 19 trillion.

MR. COATES: Yes, that is in 1988. If you read the record, we said we didn't expect to be positive about a 30-year projection, and I repeat, we are still looking at it on a five-year basis,



and beyond five years we will take our chance. If you look at the five-year figure, it is not in excess of gas now known to be in Alberta.

MR. FRAWLEY: I suggest that Alberta and Southern were a little bit worried.

MR. COATES: I am sure they are worried about it.

MR. FRAWLEY: And not only Alberta and Southern. That is so, too, isn't it?

MR. COATES: Well, again I would like to repeat that a 30-year projection is very hard for anyone to be certain of. That is the reason why I didn't think Alberta or anyone else should have a 30-year supply of gas held aside for their use.

MR. FRAWLEY: Now, just speaking of Alberta and Southern and its being worried, let's discuss it just for a moment. Alberta and Southern are offering to Alberta producers a very good price, aren't they, to take the gas to California?

MR. COATES: I think they are offering a fair price, comparable to the one we are offering.

MR. FRAWLEY: Comparable to the one you are offering now since they came into the picture? That is not an unfair statement.

MR. COATES: Perhaps you could get Mr. Orme to say no to that.



MR. FRAWLEY: It is a good thing, isn't it, for the Alberta producer to have a competing pipe line seeking to buy his gas?

MR. COATES: I think it is a good thing for everyone to have competition.

MR. FRAWLEY: That is exactly what you said when I asked you that question in Calgary.

MR. COATES: Yes.

MR. FRAWLEY: And you wouldn't like to see a situation develop where we would have our eggs in one basket, no matter how good a basket it was?

MR. COATES: We haven't said that. We said that gas that is in excess of the needs of Canada, and that includes the provinces that the gas may be produced in, should be available for export. There is no need in saving it for anything.

MR. FRAWLEY: We are all clamouring for export; there isn't any doubt about that.

Now, I want to ask you something about these sales of interruptible gas. There are advantages to interruptible sales, are there not?

MR. COATES: Yes, I think there are.

MR. FRAWLEY: What are the advantages?

MR. COATES: Well, principally to maintain load factor.

MR. FRAWLEY: And there are disadvantages,



are there not?

MR. COATES: Not as far as we are concerned.

MR. FRAWLEY: No?

MR. COATES: Of course, there is this disadvantage: if you can sell all at a premium price, but, you see, Mr. Frawley, we sell all of our gas at a price. It is the distributor is the one who rolls it all into ---

MR. FRAWLEY: Let's discuss the extent to which your sales of interruptible gas may dilute your revenue down below what you would probably like to receive for your gas.

MR. McNEILL: Mr. Chairman, I realize, as I said in Calgary, this is not a contest. It is very difficult. We have come on this particular occasion with a submission on regulation. Mr. Frawley has already cross-examined in Calgary on this market subject. We haven't got our working papers here, we haven't got documents here. It is being most unfair in that respect. If Mr. Frawley wants further cross-examination in addition to his cross-examination in Calgary, we are appearing again in Montreal, and if we have any notice of it we will try to be prepared and we can answer clearly and precisely and directly. It is hopeless for us to jump over an entire project like Trans-Canada here and there and try and be precise.



THE CHAIRMAN: I think the Commission feels that Mr. Coates has been doing very well.

On the question of interruptible sales -- that is the point, Mr. McNeill, finally -- didn't you say yesterday, Mr. Coates, that you are making no direct sales; they are all being made to distribution companies?

MR. COATES: Yes.

THE CHAIRMAN: And you would have no interruptible sales whatever except supplying areas where there was no distribution system?

MR. COATES: Yes.

THE CHAIRMAN: Where there would be industrial sales?

MR. COATES: Yes, and I just repeated that to Mr. Frawley, that we sell our gas to a distributor, and he in turn makes a sale. The load factor is, of course, good for the producer and also good for the distribution companies at the same time.



MR. FRAWLEY: First of all, with all deference to my friend Mr. McNeill, I do not intend to allow the statement which he has just made to go on the record without a very short reply. I am indeed directing myself to the brief which the company filed yesterday on regulation and my friend, Mr. McNeill, has probably and completely overlooked that in our own brief on page 13 we have said that we thought that the Energy Board should have jurisdiction over (d) the regulation of interruptible sales of gas supplied through Interprovincial Pipe Line to ensure that such sales are not adverse to the public interest. I am not trying to cross-examine on things I cross-examined on in Calgary at all but I do want to discuss with Mr. Coates just where interruptible sales of gas, regulated or non-regulated interruptible sales take the producer of gas.

THE CHAIRMAN: I do not think Mr. McNeill would object to that question from the point of view of Mr. Coates if you asked that question of Mr. Coates as an experienced gas utility operator and ask his opinion because he has already stated that the policy of his company, as I understand it, is directly opposed to making such sales except in extraordinary instances.

MR. FRAWLEY: But Mr. Chairman, is not this so, I am not pretending to know anything about the intricacies of gas sales but Mr. Coates makes

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a sales contract with the Jones Company, Mr. Jones makes interruptible sales and Mr. Jones now making interruptible sales, say, with International Nickel except for the price that he has negotiated with Mr. Coates, that must be so, the price which the consumers, the price to you is a price made with full knowledge by you at that time perhaps to sell some of it on an interruptible basis, is that not so?

MR. COATES: Sure.

MR. FRAWLEY: Of course, well that is why I do not think Mr. Coates can and I do not think he is trying to just escape any discussion or examination of interruptible sales because he himself does not make the interruptible contract but you do make a contract with Union and what is called N.O.N.G. a Consumers' and so on and they make interruptible sales, do they not?

MR. COATES: Yes sir, I am sure they do.

MR. FRAWLEY: I would like to discuss it with you if you do not mind, I might ask Consumers' something about it too but I would much rather talk to the man with whom I have privity and I have no privity with Consumers'. Now, Mr. Coates, when you were with the company that you were with in Texas you had a lot to do with interruptible sales, I suppose?

MR. COATES: Well, they sell very little or no gas directly to utilities.



MR. FRAWLEY: Something like Trans-Canada?

MR. COATES: I mean to industry, I think you will find that if the general pattern in most of the companies, there are one or two industry sales or interruptible sales but it is not the general practice.

MR. FRAWLEY: Now, an interruptible sales is necessarily made at a low price?

MR. COATES: Certainly, it could not command a premium price if you are going to call a man up and say that within an hour you will shut it off.

MR. FRAWLEY: And surely this affects your gross income picture?

MR. COATES: Well, Mr. Frawley, if you could sell that gas 100 per cent load factor at the premium price it would be a very find thing, it would be better than if you sell some at less money.

MR. FRAWLEY: Let us discuss just that, if you can sell it all at this premium price, as you say, then you could afford to pay, it necessarily follows, a higher price for the gas in the field?

MR. COATES: No, sir, we could not.

MR. FRAWLEY: No?

MR. COATES: Now, if you could sell 100 per cent at the higher price.

MR. FRAWLEY: Now, that is not a practical



thing at all?

MR. COATES: No, it is not.

MR. FRAWLEY: But as you go away from the 100 per cent premium price your ability to pay more in the field is greatly lessened, that still follows, does it not?

MR. COATES: You have to have a certain amount of revenue to make the wheels go around.

MR. FRAWLEY: That is right, and the less revenue from sales means less money to use to buy gas with in the field.

MR. COATES: Or vice versa, if you use more money to buy gas and have less money - -

MR. FRAWLEY: That is right, the producer would like to get the best price possible?

MR. COATES: Naturally.

MR. FRAWLEY: And the consumer would like to pay the lowest price for it?

MR. COATES: Naturally.

MR. FRAWLEY: And you are in between trying to do a job for both parties?

MR. COATES: Yes, sir.

MR. FRAWLEY: I am concerned that you do the best possible job for the Alberta producer.

MR. COATES: Well, we will try to.

MR. FRAWLEY: There is not any doubt about it, that there has to be a good price for the Alberta producer or there won't be the incentive for



further exploration?

MR. COATES: I think that is right, there also has to be a promise to pay to the Alberta producer and the amount to pay.

MR. FRAWLEY: Well, there is not any doubt about it at all that the coming of the pipe line company and all the activities in the pipe line companies in itself has had a great deal to do with the incentive for further exploration.

MR. COATES: Yes sir, I think so.

MR. FRAWLEY: And further exploration is now going on because of the feeling of the producers that there will be a good export market?

MR. COATES: I do not think it is entirely related to the export market, export from Alberta or Canada?

MR. FRAWLEY: From Alberta, sale of his gas.

MR. COATES: A market does exist, yes.

MR. FRAWLEY: Whereas he had nothing but the one Alberta company to sell to, he now sees the prospect of selling further afield?

MR. COATES: Yes, sir.

MR. FRAWLEY: And he is going out to the Rocky Mountain trench and he will get more gas?

MR. COATES: I hope he does.

MR. FRAWLEY: And if he does not get a good price for his gas it will certainly detrimentally affect exploration in Alberta.



MR. COATES: Of course there has to be consideration given to his price.

MR. FRAMLEY: You agree that there must be no federal control except over the interprovincial transportation of gas?

MR. COATES: Yes, sir.

MR. FRAMLEY: But you think that there should be that federal control over interprovincial transportation should extend to the price at which you sell to your distributors?

MR. COATES: Well, that is part of the provincial control.

MR. FRAMLEY: You refused to separate out the transportation cost, what I try to call per Mcf mile charge from the price of the gas?

MR. COATES: No sir, I don't attempt to set them apart, they are one and the same. You buy gas for a price and you transport it and that transportation charge as you direct it from the point of purchase to the point of sale is added onto the price of gas and that is what you sell gas for. It is all one and the same thing.

MR. FRAMLEY: You do not regard yourself just as a carrier of someone else's gas?

MR. COATES: No sir, we do not.

MR. FRAMLEY: Mr. Meriam of Northern Natural said he may want to some day transport the gas which he is purchasing in Alberta for delivery



to his system somewhere in the Minneapolis area.
Would you be prepared to carry that gas for him?

MR. COATES: I could not say at the present time, I never had any contact with Mr. Meriam in that regard. If he wishes to discuss it we will be willing to discuss it with him and whether we did or did not would have to be determined.

MR. FRAWLEY: Under such an arrangement you would be charging in the nature of per Mcf mile?

MR. COATES: The only thing he would take off that is the price of gas because he already owns it the transportation charge would be there, that would be the only difference between his price and the price we charge someone else at the same point.

MR. FRAWLEY: And that is a matter, if you could not agree on it, might be fixed by some Federal regulatory body?

MR. COATES: That is right.

MR. FRAWLEY: There is nothing very unusual about that, is there?

MR. COATES: Well, no, there is nothing unusual about it. There are some contracts of that nature in effect in the States right now.

MR. FRAWLEY: Is not the gas the Consumers' are bringing from the Niagara Transmission Line, is that not an arrangement of that kind, they bought that gas and are transporting it by Tennessee gas - -

THE CHAIRMAN: That is hardly a matter for



Mr. Coates to answer, he would not know that from his own knowledge.

MR. FRAWLEY: Well, does not Trans-Canada own the Niagara Transmission Line?

MR. COATES: Yes, but we lease it to the operators, we have nothing to do with its operation.

MR. FRAWLEY: You do not know what the tenant does?

MR. COATES: No.

MR. FRAWLEY: What connection is there, Mr. Coates, between the large industrial sale to somebody like International Nickel and the necessity for Trans-Canada to keep the wellhead price low?

MR. COATES: Would you restate that?

MR. FRAWLEY: Yes. I say, what connection is there, if any, between a large interruptible contract at a low price and the necessity for Trans-Canada to establish and maintain as low a wellhead price in Alberta as possible?

MR. COATES: Well, I still do not quite understand what you are getting at, we do not sell any gas to International Nickel, I do not know whether they are operating on interruptible or firm basis between them and the company they purchase from.

MR. FRAWLEY: Well, the gas has not started to move yet but you have made a contract with Northern Ontario Natural Gas?



MR. COATES: Yes sir, we have. When I say I do not know what the contract is between Northern Ontario Natural Gas and International Nickel, it may be interruptible, it may be a fixed contract, some quantity fixed, I do not know what the contract is.

MR. FRAWLEY: Of course, I regard this as rather a serious matter and I would like to explore it with you.



MR. PATTERSON: Mr. Chairman, you suggested a little while ago that in exploring these things, to be fair to Mr. Coates, we ask him for his opinion in regard to matters within his experience, and again Mr. Coates has just pointed out, as was done half an hour ago, that Trans-Canada as a company makes no interruptible sales. If this discussion is of value to the Commission or Mr. Frawley, surely we can keep it on a basis of drawing on Mr. Coates' general experience. Otherwise, I feel the discussion just is getting nowhere and is of no value to the Commission.

MR. FRAWLEY: Mr. Chairman, it may be my inability to express myself correctly. I am going to address myself for the moment to you, sir, and see if I can clarify it for my friend Mr. Patterson. I am addressing myself to you, sir, because I take it my friend Mr. Patterson's rising to his feet to make an application to have me cut off, and I should like not to be cut off.

The Alberta producer is selling his gas to Trans-Canada, and Trans-Canada is selling lots of it on an interruptible basis. I take that statement seriously because while they intervene, N.O.N.G. here, and Consumers here, and Natural Gas and Quebec Natural, they are selling gas which they know is going to be sold in large quantities on an interruptible basis. I must assume Mr. Coates knows because he is the only person with



whom the Alberta producers have privity. On the other hand, Alberta and Southern is there seeking to take that same gas and sell it to Pacific Gas and Electric where it goes on a higher load factor and at a higher price. I want to explore those two situations with the witness to be certain as to where the Alberta producer fits in in committing his gas to Trans-Canada, and for that reason being denied the opportunity of selling it to California. We have gone on record that we also want Canadian demands supplied before any export. There is no difference of opinion there between us. I would like to explore the relationship between interruptible sales and the price at the wellhead. We put that suggestion into our brief on purpose, and I would like a discussion with Mr. Coates. I think Mr. Coates does know all about it.

THE CHAIRMAN: Would you read that suggestion in your brief?

MR. FRAWLEY: "The Energy Board, in
"our opinion, should have jurisdiction
"over: (a), (b), (c) and (d) the regula-
"tion of interruptible sales of gas
"supplied through Interprovincial Pipe
"Lines to ensure that such sales are not
"adverse to the public interest."

THE CHAIRMAN: Well, it seems to me, Mr. Frawley, that there will be no objection in your



asking Mr. Coates as to what he thinks of paragraph (d) in your brief. It is a matter of opinion.

MR. FRAWLEY: That might be one way of rolling it all up into one question. That is the only purpose of my questioning.

THE CHAIRMAN: Let us see if we can get to an understanding on it. As I understand it, the price of gas at the wellhead in Alberta, by reason of the operational calls on line demand, is increasing. Will you agree with that?

MR. COATES: Yes, sir.

THE CHAIRMAN: Is the Province of Alberta, Mr. Frawley, advocating a dual price -- one for export and one for Canada -- in order to ensure a reasonable price to the Canadian consumer and as high as possible a price at the wellhead for the producer in Alberta, having regard to export?

MR. FRAWLEY: That position has not been taken by Alberta. We have said that we expect the Alberta Gas Trunk Line to put itself in a position where they will take gas from every well in Alberta whether for export or domestic, and what will come out of that at the moment is in the future.

THE CHAIRMAN: So it would be just one price for all gas, wouldn't it?

MR. FRAWLEY: Well, I wouldn't like to



say yes or no on behalf of Alberta as to that, because it is too far in the future.

THE CHAIRMAN: Isn't that precisely the same type of answer Mr. Coates has had to make to you, that you are making to me?

MR. FRAWLEY: When he tells me that he just gets one price from his distributors?

THE CHAIRMAN: Yes.

MR. FRAWLEY: Oh, no, because I think I am entitled to explore and go beyond that one price he gets, because that is made up of many factors; it is made up of the market situation as arrived at after a very careful analysis of the market situation in which his distributor finds himself.

THE CHAIRMAN: Let us put it another way: I think the Commission would be interested in Mr. Coates' view as to the effect of interruptible sales in Eastern Canada on gas distributed through the distribution systems in Eastern Canada at the price which Trans-Canada would have to pay in Alberta for gas.

MR. FRAWLEY: I couldn't ask anything more than that.

THE CHAIRMAN: Isn't that your question?

MR. FRAWLEY: That is precisely what I want.

THE CHAIRMAN: Well, if Mr. Coates would consider that to be your question and give his



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opinion, the Commission would be happy.

MR. FRAWLEY: That suits me fine, Mr.

Chairman..



MR. COATES: I would say, in answer to that question, that unless there was an opportunity to make any interruptible sales and thus to operate the Trans-Canada system at a high load factor, and it would be impossible for Trans-Canada to pay as much as they are at the present time for gas and still sell it in competition with other fields in Eastern Canada. I would like to clarify one point that perhaps Mr. Frawley believes to be a fact. Trans-Canada is building no facility and no capacity for interruptible sales. The capacity of the Trans-Canada Pipeline is built to meet its firm peak-day requirements, and on those days when it does not have peak-day requirements it would either have space not used or it has to make sales to the distributors who can sell this interruptible gas and can interrupt those sales for the use of the distributor for house heating and other preferred uses whenever it is necessary. Thus, since it is necessary that we have a facility that will meet the peak-day requirements at all times, if those facilities are not used to their full advantage, the cost of operation -- you cannot pay as much for gas or you have to try to sell it for more, or you have to do something to make up for the unused capacity that is lying idle.

MR. FRAWLEY: Does Trans-Canada have any storage facilities along the line?

MR. COATES: No, sir, we do not have any



storage facilities. As far as we have been able to determine -- and this is as a result of several years of study -- there is only one area in Canada that is suitable for storage, and it is principally owned and operated by the Union Gas Company.

MR. FRAWLEY: It is because you have the lack of adequate storage that you are, I suppose, required to make interruptible sales?

MR. COATES: Well, Mr. Frawley, I did not lay down this law, and I cannot help it if there is no adequate storage available. There is only one here and it is owned by somebody else. They buy gas from us on a basis that enables them to store gas so that they can meet part of their peak requirements and meet part of the peak requirements of the Consumers' Gas Company.

THE CHAIRMAN: I do not know whether Mr. Coates was here yesterday afternoon, but we had evidence on that point, Mr. Frawley, from Mr. Crozier of the Fuel Board, who said that there was storage of 80 to 100 billion cubic feet or could be within five to seven years.

MR. COATES: Yes, sir, I think that is about correct, as far as the figures are concerned.

MR. FRAWLEY: A pipeline system as big as yours needs storage certainly?

MR. COATES: It would be certainly an advantage to have storage, but there is only one.



I do not know what you can do about it. There are other pipelines similar to ours that do not have storage.

MR. FRAWLEY: If you had storage, you would have a better balanced operation, shall I say?

MR. COATES: We do not have any storage, Mr. Frawley.

MR. FRAWLEY: I am thinking about the field prices. If you had storage you could probably do a little better at the wellhead.

MR. COATES: No, sir, I do not think so. It would cost more to store the gas. You do not store gas and then sell it at the same price as gas transported directly from the field to the user. There has to be some money to take care of that operation.

THE CHAIRMAN: 15 cents was the figure.

MR. COATES: Yes, sir.

MR. FRAWLEY: Thank you, Mr. Coates.

THE CHAIRMAN: Mr. Coates, would you agree that the Metropolitan Life -- and Mr. Frawley asked you a question on this matter -- would you agree that Metropolitan Life had a different point of view and perhaps different purpose and interest than would a Canadian regulatory authority in the action asked of Trans-Canada to take on the inception of finances?

MR. COATES: Yes, sir, I think Metropolitan's purpose was completely different



from the one that the regulatory body would take.

THE CHAIRMAN: The regulatory body, as I conceive it, would have to take action and policies which would be in the natural interest and in the interest of consumer, producer and the pipeline company -- wouldn't that make sense?

MR. COATES: Yes, sir, that is correct.

THE CHAIRMAN: The Metropolitan Life would have no such interest in that?

MR. COATES: The Metropolitan Life is interested in bond coverage.

THE CHAIRMAN: I just want to get back to page 15 for a moment. You have taken the position very strongly -- do not misunderstand me -- I am not expressing any view at all -- that the price at the wellhead was no part of the control function of any regulatory authority?

MR. COATES: Yes, sir.

THE CHAIRMAN: But you would agree, would you not -- and I think you did -- that by reason of the demand for gas in the field, both for export from Canada and for consumption in Canada, the price of gas at the wellhead is on the way up?

MR. COATES: Yes, sir, I think so.

THE CHAIRMAN: There comes a point where at this end of the line, Eastern Canada, that becomes non-competitive with other fuel? Would that be clear?



MR. COATES: Yes, I think there is a limit to how high the gas can go. Of course, other fuels also are increasing in price, and I certainly cannot see any reason why an inflationary spiral is going to stop at this time. I think they are all going to go up together. Whether they go up equally is a question we will have to face at some future time. Of course, as our system grows in size and we are able to transport more gas at a less operating cost, then we can meet increased field prices without a great deal of change in selling price.

THE CHAIRMAN: Won't you get regulated down on your consumer price at that time?

MR. COATES: Previously, sir, up until the famous Phillip's decision in the Supreme Court, the price of gas was added on to non-transportation charges. Since the Phillip's decision there has been regulation of the producers selling price, and that factor has changed somewhat. So, of course, as field prices go up, I think the regulatory body perhaps will have to determine whether or not Trans-Canada was making an adequate effort to purchase gas at low prices or whether they were just indiscriminately going along with whatever was happening. I think perhaps, just thinking out loud, if the regulatory body was of the opinion that they could pay any price that anybody wanted and did not have to



pay reasonable prices, I think we would look at it adversely.

THE CHAIRMAN: Would you agree that gas is priced on the low side when compared with other fuels, and, though all fuels may go up in price, as you say, there is quite a margin that gas could go from the point of view of the producer -- put it that way -- in the price which he gets as compared with other sources of energy and fuel?

MR. COATES: Yes, sir, I think that the producer's price could go up without a great deal of effect on the final selling price of gas, because of the increased efficiency that the pipeline will have as it grows.

THE CHAIRMAN: In other words, you would be in a position to absorb that differential increase?

MR. COATES: To some extent. I do not think we could absorb it all. On the other hand, because that is a preferred fuel -- and the oil industries probably do not agree with that, but a great many people do -- I do not think you can get premium prices for it, but I think you could be very competitive on a comparable price basis, once it has had a wide introduction and people know of this and how much easier it is to use than the others.

THE CHAIRMAN: Mr. McNeill, I wonder if Mr. Tippy and Mr. Orme could follow on.

I think yesterday, Mr. Tippy, you spoke on the question when Mr. Pattillo spoke about original cost.

MR. TIPPY: Yes, sir.

THE CHAIRMAN: As an element in the rate base. When you speak of original cost, are you using it as the same meaning as historical cost?

MR. TIPPY: The only difference between original cost and historical cost, I think, is one of terms. In original cost I think we come to the cost of the facility when first devoted to the public service, and the difference between that and historical cost is that in some instances the utility property, for instance, may be made up of properties of a number of predecessor companies, and the question is, what is cost? Is cost the price that the last company paid or when it first went into service? In the case of Trans-Canada, where all the facilities, with the exception of Niagara, were actually built by Trans-Canada - I guess Niagara was built by Trans-Canada too - they would be one and the same.

THE CHAIRMAN: Yes, I would think so. Now, we spoke a lot about fair value yesterday.



Is there any Federal regulatory authority in the United States which uses fair value as a determination for rate base for a public utility?

MR. TIPPY: I am not sure about Federal Communications Commission or the Interstate Commerce Commission. They have other bases on which they regulate. In the appendix to our submission there is a page or two on that, but I think you will find that we make reference to fair value as being somewhat of an increasing trend on this, largely at State level at this point. There are a number of cases, and there will probably be a lot more, before the Federal Power Commission for regulation of a fair value. If and when they receive attention by the Federal Power Commission is anybody's guess. But many of the States have recognized fair value in the light of economic conditions today. The trend was towards the use of original cost at one time, and it has swung back and it is using fair value as a base.

THE CHAIRMAN: The Federal Power Commission was created in the early thirties, was it not?

MR. TIPPY: Well, the Power Commission, on the electric side, goes back quite a way, but it was 1938.

THE CHAIRMAN: Early thirties, wasn't it?



MR. TIPPY: It was only elected in 1938.

THE CHAIRMAN: In the early thirties wasn't the regulation brought in as far as the electric side is concerned on the historical cost?

MR. TIPPY: I haven't been in a case before the Federal Power Commission on the electric side for some time. There are very few of those cases nowadays. I am afraid I can't tell you.

THE CHAIRMAN: Mr. Hearne, is that correct?

MR. HEARNE: As far as I know, the first time I had any dealings with the Federal Power Commission was in 1923, and they had then been in existence, I think, a year. As far as I know, then it was historical cost basis, and they had the right to take over a hydro plant, and that was historical cost.

THE CHAIRMAN: Then the same principle was put into operation in the Natural Gas Act, was it not?

MR. TIPPY: Just a moment. Section 6 (a) of the Natural Gas Act, which deals with the ascertainment of cost of property, says:

"The Commission may investigate and ascertain the actual legitimate cost of the property of every natural gas company, the depreciation



thereof, and, when found necessary for rate-fixing purposes other facts which bear on the determination of such cost or depreciation in the fair value of such propertyⁱⁱ.

THE CHAIRMAN: And is that the basis on which the Federal Power Commission in the United States at the present time fixes a rate basis?

MR. TIPPY: The Federal Power Commission has taken the position, and apparently has been successful in the cases that have gone through the Courts, in using original cost less depreciation as the measure of fair value, and they say it. That is in the Hope case where the Hope case says we are not to export to these people, and if the end result is reasonable, it stands out, and nobody has successfully attacked that in Court.

THE CHAIRMAN: But let us see if we can get to the bottom of this; I would like to understand. Actually what they do then, is to apply the principle of original or historical cost less depreciation and they bring in other factors on a basis of, we might call it, personal judgment or judgment which they then relate to fair value in order to come out with a return which could be considered to be fair and reasonable under the circumstances.



MR. TIPPY: I think that is a reasonable statement on it, sir.

THE CHAIRMAN: Can you tell me what rate of return the Federal Power Commission tries to level off at?

MR. TIPPY: Up until quite recently they have pretty well standardized - first, let me say, in each case the question of proper rate of return is the question of the testimony both by the staff and the applicant; but the end result of regulation has been, a Federal Power Commission regulation has been a figure around 6 per cent. That has tended to move up slightly in the last few years. There are contentions for rates of return now by some of the pipe line companies; I guess 6 3/4 per cent is the highest anyone is contending for, based on the situation in the States at that time.

THE CHAIRMAN: Natural pipeline?

MR. TIPPY: Yes, natural pipeline.

THE CHAIRMAN: Thank you, Mr. Tippy.

Mr. Coates, I know Mr. Pattillo asked you some questions yesterday, and I have not had an opportunity to go over the transcript, in connection with your conclusions and recommendations. I would like really to get deeper into the reason why you and your colleagues have come to such a definite conclusion and recommendation



with respect to the establishment of a regulatory Board, one on the policy side and one on the other, and merely because, at first blush, it does seem that that leads to additional administrative costs and all that sort of thing. Surely in Canada there will be a limited number only of, let us say, interprovincial gas transmission lines, and presumably that is also true there, by reason of our geography, put it that way. Do you feel the Commission would be justified in recommending to the Government the establishment of separate organizations of this nature? Could it not be all done within one group, if such were to be the case?



MR. COATES: Well, yes, sir, I am quite sure it could all be done in the one group. We felt that the two separate bodies perhaps could function more efficiently because you have a group that was familiar with the activities of the oil and gas industry, experts who are given to that particular field and could handle the cases more efficiently and more readily than you could if it were a group of commissioners who had regulation or policy-making authorities over all energy. Then it would get to be a cumbersome operation. I am quite sure that there could be a national energy board set up and have their various branches necessary to cope with the various fields of energy.

So far in the regulatory bodies that I have appeared before the commissioners themselves sit on all the hearings and I think it would be an almost impossible job for the commissioners to continue that particular policy, to sit on a board and then to have sufficient time to make policy as regards all types of energy.

THE CHAIRMAN: Would you feel that there would be so many applications to the board for fixation of rates that that would absorb a very large proportion of the time of the personnel?

MR. COATES: I think you would have to have a personnel trained in the oil and gas business in order to cope with oil and gas problems.



I cannot envisage a great number of cases but I do believe that there is a possibility of additional oil lines, there is a possibility of additional requests for export from the country as well as from the Province of Alberta. There will perhaps be requests for additional interprovincial pipe lines that could run between Saskatchewan and Manitoba to serve some particular area.

THE CHAIRMAN: You would feel that the Dominion going into this field in perhaps a more detailed way than it has heretofore, although the legislation, a good deal of it, is there if they care to do it -- would you feel that you would be trapped in the incentives of the various provincial jurisdictions who now go into it with great detail? I am thinking particularly of the Province of Alberta. I am not singling it out in that sense, although that is where most of it has been centered and the Oil and Gas Conservation Board, would they feel that, along with George DeWitt, they were passing the buck to Ottawa?

MR. COATES: No, sir, I do not see that that would occur. At the present time it is necessary for Alberta to act on the various phases that they have jurisdiction over. At the present time the Board of Transport Commissioners rely on the fact that it has been established that it should treat gas from Alberta. I believe the Province



of Alberta would continue, I believe the Ontario Fuel Board would continue much as it does now in regulating the facets that they have jurisdiction over.

THE CHAIRMAN: Would you feel that the Dominion regulatory authority should accept as final the decision of the provincial authority or should the Dominion authority look behind and review the evidence given to the provincial authority?

MR. COATES: Well, sir, I would not expect that there would be any conflict of interest; that the regulation would be such that it would not be necessary for the federal body to look behind what the provincial body had done, or vice versa.

THE CHAIRMAN: Well, suppose you wanted more gas in Eastern Canada and supposing the Province of Alberta was granting an export permit across the boundary, there would be a conflict of interest there, would there not?

MR. COATES: Well, I will ask the legal department to correct me if I am wrong, but at the present time I think Alberta says transmittal of gas is separate from Alberta, not necessarily from Canada. They say they have "x" number of feet of gas and need so much in Alberta and the rest of it can move out of there.

THE CHAIRMAN: But from a Dominion point

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of view if it gives an export permit from Alberta and their line goes across the border and not east and west, surely that is an export from Canada that Alberta is putting a seal of approval on, although it cannot grant that actual export licence.

MR. McNEILL: That is true. In effecting the procedure in Alberta adopted by the Alberta Board, it does allow, at least indirectly, the choosing by the Alberta Board of the vehicle that will carry the gas out of the project and thereby the project at which that gas is going to be used. Undoubtedly there could be a conflict if the situation you described occurred -- gas to Eastern Canada going out of the country itself. The federal authority would again decide whether it could in fact go, and I do not think the federal authority would need to look behind the finding as to the adequacy of reserves. I am speaking now of the technical side in that respect.

THE CHAIRMAN: Gentlemen, shall we have a ten-minute break?

---Short recess.

THE CHAIRMAN: Gentlemen, we will now resume our hearing.

Mr. Coates, there has been a great deal of discussion in the Press and elsewhere and a considerable amount of testimony has been given to this Commission with respect to the utilization of Canadian crude oil from Western Canada in the so-called Montreal market. Has Trans-Canada made any study as to the extent to which natural gas, which you would be bringing from Western Canada, would displace fuel oil in that area, say, Quebec and the so-called Montreal market, over the course of the next five to ten years as a fuel, thereby decreasing the demand for crude oil or the product in that section of the country? You can answer that question without taking into account growth of the ordinary market for oil products.

MR. COATES: Well, first, I think perhaps Mr. Tippy or Mr. Orme can answer that, but as I understood what I read in the Press, it is to replace oil that is going to be there whether it comes from Western Canada - - it is going to replace oil that is already being refined in the Montreal area; that is, from some other source.

THE CHAIRMAN: That is the object.



MR. COATES: So, we are not shutting off a potential market from that respect; that is my understanding. Then, further than that, in regard to your question, is gas then going to reduce the oil requirement...

THE CHAIRMAN: That is right.

MR. COATES: I think Mr. Tippy or Mr. Orme, who made these studies, can tell you.

MR. ORME: Mr. Chairman, in making the estimates of the gas requirements of the Montreal area there was a detailed industrial survey made for the Montreal area which included a determination of the present fuel usage by each of the industries served there; not just for the most recent twelve months, but over a period of two or three years at least, to get some idea of what the trend in usage was. These quantities of industrial fuel at present being used in industry were then compared to the equivalent volume of natural gas for the purpose of determining the then existing potential market for the sale of natural gas, giving effect to the price that was being paid for the fuel which is presently being used. On the basis of the fuels which were presently being used we could give you a very close approximation of what percentage of the interruptible sales - as far as that is



concerned, the current industrial sales, in the Montreal market - is represented by expected displacement of oil and expected displacement of coal and other fuels which are presently being used.

We are making a more detailed study with respect to the markets other than Montreal, and we expect to be in a position during the course of the Montreal hearings where we can more fully answer questions of that nature than we are prepared to at this time.

THE CHAIRMAN: That is fine, as long as we can get your views. We would like to get the assistance you can give us and it is quite all right if we can get it at Montreal.

MR. ORME: Yes, sir.

THE CHAIRMAN: Thank you very much.



MR. COMMISSIONER HARDY: Mr. Chairman, in Mr. Crozier's presentation yesterday, in the cross-examination of him, he appeared to have some ideas concerning storage that were a little different from my understanding of the situation as presented, and I would like to get the opinion of Trans-Canada on some of these things, but I understand that they have not had a chance to see Mr. Crozier's evidence. If they will be prepared to discuss it in Montreal, that will be all right.

MR. McNEILL: It has been already arranged with Mr. Pattillo. We have been asked to put in some supplementary material on the subject of storage, and it had been arranged that that would go in at the Montreal hearings. That will also give us an opportunity to study the statement that was made yesterday afternoon, which we have not had an opportunity to study.

THE CHAIRMAN: Thank you very much.

MR. COMMISSIONER HOWLAND: Mr. Coates, on page 20 of the brief you say:

"Every effort should be made toward designing procedures which will eliminate or reduce paper work . . . "

You are really talking about the problem of reducing to simplicity the procedures of any new Board. You have been before a lot of the Boards. Have you any concrete suggestions to this Commission as to the



procedures of a Board?

MR. COATES: I do not have at this time. I think that there is a resume in here of the Federal Power Commission Act. We have made a suggestion that we would be pleased to work with the Commission staff in working out the details of what we are referring to here. The Federal Power Commission has got a very cumbersome operation, and there are many things -- there is quite a list of things -- that I am sure could be eliminated, requirements could be eliminated, and still arrive at the same answer. We certainly would be pleased to assist in any way that we can in preparing the list of those things that could be eliminated without having any effect on the actual regulations and the mandatory regulations.

MR. COMMISSIONER HOWLAND: That is very good, because it is quite apparent that there are a great many procedures which can get pretty involved, and it may be that first thought should be given to the reason for the procedures.

MR. COATES: There are quite a number of things that get so involved, and there gets to be so much paper that it is very difficult to tell where you are at times. I am sure it must be very confusing to the regulatory authorities themselves to have so much paper.

MR. COMMISSIONER HOWLAND: There is a



second matter. I was listening to your discussion, and I wanted to refer to the matter at some convenient time without interrupting the replies. What I was rather interested in was understanding the facts of your position. The Alberta Government recommended, as Mr. Frawley said, that this should be a Federal matter, a Federal concern. By reason of your organizational procedures on your sales, which you told the Commission you think is the right procedure, you have made this - if I can couple the procedures with your recommendations regarding regulation -- you have made this a provincial matter, because you have said, as I understand it, the distributing companies, if they are to be regulated in prices, will be under the provincial jurisdiction?

MR. COATES: That is correct, for the distribution company, the regulation as far as Trans-Canada is concerned would extend to the point where the gas is sold and delivered to the distribution companies.

MR. COMMISSIONER HOWLAND: That is right, and that includes gas which will later be sold on an interruptible basis, which is your price to them if based on the realities of their sales pattern, which includes some interruptible supplies?

MR. COATES: Yes, sir.

MR. COMMISSIONER HOWLAND: This is what I am getting at -- an understanding of the facts, that



this is in your recommendation that it is really a provincial matter.

MR. COATES: The regulation of price, the selling price.

MR. COMMISSIONER HOWLAND: Of interruptible supplies, among others?

MR. COATES: Yes, sir, the selling price to the ultimate consumer would be the jurisdiction of the Provincial Government.

MR. COMMISSIONER HOWLAND: I am just trying to understand. I am not being critical.

MR. COATES: Yes, sir.

MR. COMMISSIONER HOWLAND: Is it true that under some circumstances this could be of some federal concern? If you visualize your National Energy Board or your control authority being concerned with such matters as subventions on fuel, here you have a situation -- and I am very glad to hear Mr. Orme is going to give us some figures on the displacement of coal. My guess on that is not worth much, but it is that that is a fairly substantial figure. It will not work necessarily with distress to the Nova Scotia coal industry, but it might be of distress to a Federal authority which is doing a fairly heavy subvention. At that time it seems to me it must be a Federal concern,, and yet now, lying under your proposal, it is a purely provincial matter. By the way, I am trying to figure

June 1, 1906

Dear Mr. [Name],

I have just received your letter of the 28th inst. regarding the [subject] and am glad to hear that you are interested in the [subject].

I am sorry that I cannot give you a more definite answer at this time, but the [subject] is a very complicated one and requires a great deal of study and research.

I am sure that you will understand my position and that I will be able to give you a more complete answer in the future.

I am, Sir, very respectfully,
Yours truly,
[Name]



out how we can go from here.

MR. COATES: That, I think, gets back to one of the points that we felt made it advisable to have a separate National Energy Board rather than a regulatory authority to determine policy as regards the various energies and that the Federal Government on a policy level could make decisions as to subsidies to whichever ones there may be, or lack of subsidies, or whatever the recommendation is.

MR. COMMISSIONER HOWLAND: The effect of that would be surely that the Federal body would not have the jurisdiction to deal with the problem, and perhaps you are just saying the righthand should not know what the left hand is doing.

MR. COATES: No, sir, I am not saying that. I am saying that I think it is perhaps wrong, in my thinking, but anyway it is the way I feel about it, that someone has to establish a National Energy policy, and that National Energy Policy Board should not be the one that would then regulate the various industries that will be handling this. I think your point was perhaps the substitution of Nova Scotia coal by interruptible gas. When it gets beyond regulation, I think it gets to be a policy matter then.

MR. COMMISSIONER HOWLAND: It is just a matter of understanding the action. As I understand this, your concept of the two boards as being separate would mean the regulatory authority would not in fact



deal with this matter, because it was only concerned with oil or gas?

MR. COATES: Yes, sir, and concerned with the regulation of oil and gas. The policy as regards energy -- and that is all forms of energy and its use in Canada and its export from Canada -- would be something that to me would be more of a national policy level rather than a regulatory matter.

MR. COMMISSIONER HOWLAND: This, as I remember your estimates, amounts to about one-third of the volume of your transmission, running over a long period?

MR. COATES: I do not recall that figure. Maybe you had better let one of these experts answer.

MR. COMMISSIONER HOWLAND: What I am trying to establish is not that it is exactly one-third but that it is not a small incidental matter.

MR. ORME: I do not understand the question.

MR. COMMISSIONER HOWLAND: That about one-third of the volume of the gas coming through Trans-Canada will be in fact for interruptible sales under your forecast?

MR. ORME: I do not have my appraisals before me, but I would say that that would be approximately what it would be. It might be a little more than that for some years. In the earlier years it probably will be more.



MR. COMMISSIONER HOWLAND: I do not mind as long as you agree that it is a substantial factor.

MR. ORME: Yes, it is a substantial factor.

MR. COMMISSIONER HOWLAND: To climb on the other side of the fence, as I understand it, Mr. Coates, the normal financial drive of a distributing company is to reduce this interruptible section of their sales to the lowest possible factor?

MR. COATES: Yes, sir, because this gas is sold at the lowest possible price.

MR. COMMISSIONER HOWLAND: So, in other words, the incentive driving industry is to cut the interruptible supply as low as possible?

MR. COATES: Yes, sir.

MR. COMMISSIONER HOWLAND: I do not know whether you would rather discuss this in Montreal or here. I was rather interested -- more than rather interested -- I was interested in the reply you gave regarding the export contract to the Midwestern. You said yesterday that in fact if the export permit was extended to you that you would have to go out and buy new gas at the new higher rates. What I was interested in -- and I give you a chance to slough off the question if you prefer -- what I was interested in is this: if you in fact had to do it, and disregarding all historical factors or any arguments regarding whether this was originally bought for the United States market or not, whether in fact under the present



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contract you could make a profit on such sales and,
if you could, secondly, would it be a profit
comparable to what you anticipate making in your
eastern sales?



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MR. COATES: Well, Doctor Howland, I think if it is permissible with you, we would like to develop those figures and put them in for you in Montreal. I would like to have the precise figures.

MR. COMMISSIONER HOWLAND: Yes, thank you.

MR. COMMISSIONER BRITNELL: Mr. Coates, I think I understand the nature and the functions of your proposed Federal Regulatory Agency. However, I still find your second Federal Agency, the proposed Energy Board, removed as it is from any regulatory function, remains rather shadowy and insubstantial body or agency in my mind. I wonder whether you would mind expanding a bit your outline on pages 20 and 21 of your present submission and what you said yesterday to Mr. Pattillo. I take it that this proposed Energy Board would be almost exclusively advisory in function. You say, in the first full paragraph on page 21:

"The Energy Board should be a fact-finding, estimating and reporting body and would make recommendations with respect to legislation".

Would you mind giving us your views as to the Board's possible composition and personnel, who they might be, who they might represent, how they might be picked or chosen, and what their qualifications



should be?

MR. COATES: Sir, I think it could be one of two types of Boards. First, I think it could be a Board that was composed of senior Civil Servants who were answering directly to the Ministers who have to do with energy and the transportation of energy in that particular part of the Government operations, and this Board would make recommendations to those Ministers and those Ministers in turn would handle it from there as far as national policy is concerned. Or it could be a Board appointed by the Cabinet, Governor-General in Council, a group of men who were versed in the various types of energy, say, a man from the coal industry, a man from the oil industry, a man from the gas industry, someone from atomic energy, and they would be responsible to reporting to some branch of the Government, the one particularly affected, or to a group of men, such as the ones previously mentioned, and it would be their responsibility, this National Energy Board, to keep aware at all times of the energy requirements, present and potential, and the sources that could be available, present and potential.

MR. COMMISSIONER BRITNELL: You have given a choice, as it were, of two possible types of Energy Board here, both very interesting, the



first being your group of senior Civil Servants, the other would act, I suppose, in some sense as some senate of the industry itself, the wise men of the industry. Would you care to express preference as to which composition you would prefer to see followed?

MR. COATES: Well, I really haven't thought much about it, preference, but from the standpoint of, I would think, efficiency, perhaps the senior Civil Servant group would be a proper one.

MR. COMMISSIONER BRITNELL: Since they presumably would consult the wise men of the industry, shall we say.

MR. COATES: Well, I assume that they would do that, and I am sure there would be opportunity for industry to appear before them or with them in discussing and arriving at the facts.

MR. COMMISSIONER BRITNELL: Thank you very much, Mr. Coates. That makes it a lot more real to me.

MR. FRAWLEY: Mr. Chairman, may I ask one question on that?

THE CHAIRMAN: Certainly.

MR. FRAWLEY: Mr. Coates, wouldn't the Board of senior Civil Servants be just another Government Department for all practical purposes?

MR. COATES: Well, I don't know whether



it would be another Government Department or pieces of several Government Departments which would act as a group.

MR. FRAWLEY: When they would be sitting together, these senior Civil Servants, they would be responsible every day, from day to day, to their Ministers, and I am just suggesting - I am not endeavouring to be too critical of your suggestion, but it does strike me that you wouldn't want to have another Federal Government Department to supervise all these operations all over Canada.

MR. COATES: Mr. Frawly, as I said, I have no fixed notions about whether it should be the Civil Servants or some appointees from industry.

MR. FRAWLEY: But there again your alternative Board would be one man from atomic energy, one man from coal, one man from oil and one man from gas. Do you think they would agree on anything?

MR. COATES: They would get some facts together.



MR. COMMISSIONER LADNER: Mr. Chairman, I have a question which I think Mr. McNeill should properly answer because it deals with a legal question. I refer to page 8 of the brief, at the top, where it deals with the Gas Resources Preservation Act, 1956, of Alberta, and in part it reads:

"Section 10 of the Act specifically
"provides that if in the opinion of the
"Board an unforeseen emergency jeopardizes
"an adequate supply of gas to consumers
"within the province the Board may, during
"such emergency and for the purpose of
"meeting the emergency, require a diversion
"of any gas intended for industrial use
"outside the province to such other uses
"as the Board may direct."

Now, in reference to Alberta, page 23, dealing with Alberta statutes and regulations, page 23 of the Supplement, where Section 10 is set out, it says:

"Notwithstanding any permit or the
"provisions of any Act, if in the opinion
"of the Board an unforeseen emergency
"jeopardizes an adequate supply of gas to
"customers within the province the Board
"may, with the approval of the Lieutenant
"Governor in Council ---?

Now, "with the approval of the Lieutenant Governor in Council" you get into a different



atmosphere than if you had a semi-judicial body such as a board determining this.

Now, I put the practical question: supposing after a number of years an industry in Toronto, say the steel industry which uses a great deal of heat from gas and oil, had been established, would it be possible under that section for the Government and the board in Alberta, for reasons it deemed to be an emergency, to cut off entirely the supply of fuel to the industry in Toronto -- or it may be any province. Do you know from experience or practice or any other way?

MR. McNEILL: Well, I do not know of any occurrence in which the Board acted under this section. The present section is somewhat less drastic than the section in the earlier Act which it replaced -- that the Board with the approval of the Lieutenant Governor in Council can divert gas that is intended for industrial use outside the province. It used not to be limited to industrial use; it was any gas going outside of the province. I think the Legislature of Alberta in passing this particular section felt that they were diverting, and I think only for a temporary emergency, gas to a priority use, which from my understanding of the gas industry generally is a usual thing if for any reason mechanical breakdown or otherwise or the gas supply is short, you



cut off customers in order of priority. The top priority, of course, is the home heating. I think the Province of Alberta was attempting to do that and is attempting to do that. There is some question as to the constitutionality of that particular section.

MR. COMMISSIONER LADNER: That is my next question, and I would like you to deal with that if you have looked into it.

MR. McNEILL: Well, in the appendices to our Supplement Dr. Alex Smith of the University of Alberta Law School took some sixty or seventy pages to analyse that problem. I think it is quite clear from his opinion that he feels quite strongly that the Act is not constitutional.

THE CHAIRMAN: That would certainly bring into operation peace, order and good government -- the provision giving the Dominion jurisdiction, and by the time the constitutionality of that was determined the emergency would surely have passed.

MR. McNEILL: I think that is true; I do not think it would bother anyone that acted under that section. You have to have reference to the Supreme Court of Canada to find out whether they could or could not.

MR. COMMISSIONER LADNER: I would like to ask another question dealing with the matter of



the effect of this section, the effect upon the contracts, long-term contracts, that are made and the setting up of the capital structure and the business of the pipe line companies. For instance, has it any effect, in your opinion?

MR. McNEILL: It certainly has had an effect. It has given rise to doubts of distributing companies in entering into contracts to purchase gas from us in so far as financing is concerned. They certainly sought assurances that this would not happen day in and day out. I think that is Westcoast's greatest problem. It has been testifying before the Federal Power Commission. We have been attacked on the basis of the gas supply going to the United States would be cut off by the action of a provincial government and they express some doubt that our gas supply is certain. That has been urged on many occasions before the Federal Power Commission, and I assume this case of Westcoast caused the recent amendment which is somewhat less drastic than the original.

MR. COMMISSIONER LADNER: Does the Government of Alberta indicate any policy in respect to what constitutes an emergency jeopardizing an adequate supply of gas to consumers?

MR. McNEILL: No, sir, I have no idea what their thinking is in that respect and I am



not aware of an incident that has been declared to be an emergency.

MR. COMMISSIONER LADNER: Well, in an application to the United States authorities, the Federal Power Commission, does the Government make any representation in respect to that matter?

MR. McNEILL: No, those matters have been dealt with by Mr. McDonald and myself. We have been put on the stand as experts on Canadian law and we have attempted to answer those questions.

MR. COMMISSIONER LADNER: Thank you.

MR. FRAWLEY: They are both good Alberta lawyers.

THE CHAIRMAN: Thank you very much indeed, Mr. Coates, Mr. McNeill, Mr. Leyton and Mr. Tippy and all your colleagues for the cooperation which you have given us at our hearings here as well in Western Canada. We appreciate your going to give us further information and assistance at our Montreal hearings and we also appreciate, Mr. Coates, the manner in which you appear before us and endeavour to answer the questions frankly and to the best of your ability. Thank you very much.

MR. COATES: Thank you, Mr. Chairman.

THE CHAIRMAN: We will now adjourn until Monday morning at 10.00 a.m., in this room, at



which time I think the Consumers Gas Company and the Interprovincial Pipe Line Company and Imperial Oil will give testimony before us. Consumers Gas will give testimony with respect to markets for gas in the district in which it serves in Eastern Canada.

The hearing of the Commission is now adjourned until Monday morning at 10.00 a.m.

---Whereupon the hearing adjourned at 12.10 p.m.
to resume at 10.00 a.m., Monday, July 7, 1958.

Mr Gordon

ROYAL COMMISSION

ON

ENERGY

HEARINGS

HELD AT

TORONTO

ONT.

VOLUME No.:

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ROYAL COMMISSION

ON

ENERGY

Hearings held at Toronto,
commencing Wednesday,
July 2, 1958, at 10.00 a.m.

PRESENT:

Mr. H. Borden, C.M.G., Q.C.	Chairman
Mr. J. L. Levesque	Member
Mr. G. E. Britnell	Member
Dr. R. D. Howland	Member
Mr. L. J. Ladner, Q.C.	Member
Dr. R. M. Hardy	Member

COMMISSION COUNSEL:

Mr. A. S. Pattillo, Q.C.
Mr. Miles H. Patterson

Mr. J. F. Parkinson	Secretary to the Commission
Major N. Lafrance	Assistant Secretary to the Commission



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EXHIBITS

<u>No.</u>		<u>Page</u>
T-7-1	Submission of Consumers' Gas Company Limited	6833
T-7-2	Submission of Interprovincial Pipeline Company	6905
T-7-3	Oil and Gas Conservation Board Statement by Mr. McKinnon	6910
T-7-4	Study entitled "Forecast of the Canadian Demand and Supply for Crude Oil and Products"	6910
T-7-5	Independent Pipeline Company Statement of further study submitted by Mr. Brown, Home Oil Company	6921
T-7-6	Engineering Report prepared by Dutton-Williams	6921
T-7-7	Supplementary Submission by Imperial Oil Limited	6968

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Monday,
July 7, 1958

---On resuming at 10.00 a.m.

---Mr. Commissioner Levesque was not present.

Submission of
CONSUMERS' GAS COMPANY LIMITED

THE CHAIRMAN: Gentlemen, the Commission will now resume its hearing. Mr. Pattillo?

MR. PATTILLO: Thank you, Mr. Chairman. We have this morning the Consumers' Gas Company, and they have filed their brief, which I suggest be marked T-7-1. Mr. Jones, the Vice-President and General Manager of the company, is here with the group, and I will ask Mr. Jones to introduce the members of his group to the Commission and then to proceed with the brief.

MR. JONES: Mr. Chairman, Mr. Pattillo, I have with me on my left Mr. Jack Lee -- the names are listed on page 2 of the brief -- and Mr. Lee is our General Superintendent of Works and Gas Supply. On my right is Mr. F.W. Hurst, who is Assistant Secretary and Comptroller. On my far right is J.C. McCarthy, our General Sales Manager. Mr. W.M. Kelly, our General Superintendent, Distribution, will be sitting behind me.

I will try to answer the questions that are asked myself with consultation with this group.

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---EXHIBIT NO. T-7-1: Submission of Consumers'
Gas Company Limited.

MR. JONES: By this letter and accompanying exhibits The Consumers' Gas Company and its two subsidiaries, Niagara Gas Transmission Limited and Provincial Gas Company Limited, submit to your Commission information in the form of figures and ideas which we hope will be of assistance to you in the preparation of your recommendations.

The Consumers' Gas Company was formerly titled The Consumers' Gas Company of Toronto and served generally Metropolitan Toronto. With the prospects of Western Canadian natural gas and, in the interim period, with its own supply of natural gas from the Southern United States, it was desirable to enlarge its service area.

This enlargement is to assist in providing a potential for future customer growth, diversified loads, to make natural gas service available in communities where it could not otherwise be justified, and to help the Company thereby maintain its competitive position with other fuels.

As may be seen from the map in Exhibit 1 Consumers' and its subsidiaries are now offering full natural gas service -- that is 100 per cent natural gas -- in Metropolitan Toronto and its environs; the rich agricultural



and industrial areas of the Niagara Peninsula; the Whitby, Oshawa, Bowmanville industrial community; the National Capital of Ottawa; and by the Fall of 1958 will have extended its service into the rapidly developing Georgian Bay areas of Barrie to Owen Sound and the Ottawa Valley from Brockville to Pembroke and Hawkesbury.

In addition to this letter and the exhibits (of which 25 copies are being submitted herewith) we will make any and all members of our Company who prepared the contents hereof available to your Commission for questioning regarding the methods used in preparing the estimates or for such other figures or information as you may request at the hearing on Monday, July 7th, at 10.00 a.m. in the Senate Chamber of the University. We do not propose to make any further written or oral submission on that date.

This letter is being submitted with the full knowledge of our Board of Directors and the information was prepared by employees under the direction of:

Oakah L. Jones	- Vice-President and General Manager
F.W. Hurst	- Assistant Secretary and Comptroller
J.E. Lee	- General Superintendent of Works and Gas Supply
W.M. Kelly	- General Superintendent - Distribution
J.C. McCarthy	- General Sales Manager



We are not using any consultants or counsel, Mr. Chairman, today, and all of these men -- although I will be doing most of the talking, I would ask that you let me boast slightly about them because they are all men who are in the manufacturing gas business and have now become natural gas men, and I would match them against anybody in the United States; I think very much of them. So I hope you will excuse me boasting about them, but they are our own men.

We submit this letter because we are or could be involved in or affected by any one or all of the recommendations your Commission may make under the paragraphs of your "Terms of Reference" of October 15, 1957.

This letter is divided into the following parts:

- (1) Copies of most recent annual report and prospectus.
- (2) Map of service area and estimate of gas sales in millions of cubic feet (Mmcf) for 30 years and comparison of these figures with the 5-year forecast previously submitted by us to Trans-Canada Pipe Lines Limited.
- (3) Our opinion as to value to our customers of export and import of natural gas with particular reference to the line known as the "Niagara Line" (Niagara Line is owned by Western Pipe



Lines and leased by us -- such lease to terminate when Western Canadian gas is available.) extending from the Niagara River to Sheridan, Ontario, and now bringing United States gas to the Toronto area.

(4) We also submit our opinions on the importance of underground storage facilities to our company.

1. ANNUAL REPORT AND PROSPECTUS -- attached as Exhibit Nos. 2 & 3.

2. ESTIMATE OF GAS SALES -- Millions of cubic feet -- 30 years -- 12 months ending September 30; 1959 to 1988 inclusive.

The forecasts are made on Company and industry experience, starting with the Ontario Government's publication "Population Projections for the Economic Regions, Counties and Urban Areas of Ontario, 1956 to 1976" plotted for each county, and the resultant curve extended for another twelve years providing a 30-year population forecast on 5-year intervals.

We received considerable assistance in these population figures from Mr. Gathercole and Mr. Crozier who appeared last week from the Ontario Government.

These population figures were then used for estimating our residential, commercial and industrial requirements using varying saturation, degree day, and unit consumption figures.

The Company believes the estimates shown



in Exhibit 1 to be realistic and attainable. In preparing the estimates the Company used the following general assumptions:

- (a) That the Company's success in its sales programme is dependent upon the same factors that control the sales of all other types of service and merchandise.

These are mainly the sale of its product at fair prices competitive with other fuels and with its employees giving service to its customers which is superior to that given by its competitors. In other words, barring outside influences, the attainment of its sales goals is within the Company's control.

- (b) That the competitive position of gas with other fuels remains constant. This is essential due to the highly competitive nature of the Company's business:
 - (i) although for years considered a "monopoly" the gas business is not such, as even though it is under all inclusive Provincial regulation it must compete in every use for the public's fuel business with non-regulated distributors of other fuels such as oil, propane and other LPG products, coal and electric energy;
 - (ii) any increase in the price of gas to the distribution company caused by the gas producer or the pipeline company, or any arbitrary decrease in the price of a competitive fuel could adversely



affect the economic stability and competitive position of the distributing company which, because of government regulation on earnings, is not in a position to acquire financial reserves with which to protect itself or compete against the non-regulated producer or other fuel distributor;

(iii) a gas distributing company is particularly vulnerable to the pricing policies of the producer since the product (gas) it is distributing generally comes from a producer who is in all three businesses -- oil, gas and propane.

Our estimates have also been prepared on the assumption

(c) That it must continue to purchase its major gas supply from Trans-Canada Pipe Lines. This is for the reason that by three party agreement dated April 2, 1954, Consumers' (Niagara) agreed that it would enter a contract with Trans-Canada whereby Trans-Canada would be its sole supplier, and as a consideration Tennessee Gas Transmission (a third party to the agreement) would supply gas to Consumers' on an interim basis pending arrival of western Canadian gas in Toronto. Consumers' entered such gas supply contracts with Trans-Canada on October 5, 1956, on January 10, 1958, and has also requested additional gas supplies.

Consumers' in its negotiation for natural



gas was encouraged to believe that the Government of Canada, the Government of Alberta, and the producers, were so interested in the development of the eastern Canadian market for western Canadian gas that adequate future gas supplies for sale at competitive prices would be available to Consumers', and that customers of Consumers' would not lose because of the sole supplier status which was considered a necessary part of the plan to permit financing of the all-Canadian routing of Trans-Canada pipe line.

In Consumers' competitive position also and also in the assumption in preparing this, we have assumed

(d) That the Commission will be successful in finding means of avoiding the recent unfortunate experience of the United States in the serious disagreements between the natural gas producers and the natural gas distributing companies, and customers.

3. VALUE TO OUR CUSTOMERS OF EXPORT AND IMPORT OF NATURAL GAS WITH PARTICULAR REFERENCE TO THE "NIAGARA LINE".

In November 1954 Consumers' (Niagara) leased from Trans-Canada (Western Pipe Lines, being a subsidiary of Trans-Canada) the 76 miles of 20-inch transmission line constructed for Western



in 1954. The line is presently used by Consumers' to supply its own requirements, those of its subsidiary, Provincial, and for gas for the Grimsby Gas Company and United Suburban Gas Co. Limited in the Burlington, etc., area. Upon the arrival of western Canadian gas it is expected the flow of gas will be reversed and the Provincial and Grimsby systems served with western Canadian gas instead of the United States gas as at present.

I do not mention in the brief, Mr. Chairman, any further supply of the United Suburban Gas Company because they have built their own line and we presume they will be changing over to their own supply.

From the viewpoint of a distributing company like Consumers', a line such as the Niagara line has the following major advantages:

- (a) To help maintain lower prices to the end use customer by export of surplus gas (if any is available) either on a regular or periodic basis by thereby using a pipe line system to its greatest current potential. Unlike many businesses which can add plant capacity as needed through building additions, the distribution and transmission natural gas business, like the Ontario Hydro, must plan and construct far in advance of the creation of the actual load.



Therefore, at the time of completion of facilities a company may have a system larger than its load requirements, then, as by sales promotion the load grows, the gap between available supply and demand gradually closes and it is necessary to repeat the operation of excess capacity all over again. During that period of excess capacity the export connection could be of material value to help in keeping costs down by sale of gas on a periodic or interruptible or short term basis. Also during a temporary period when demand is larger than capacity it could be that the imports could be made available on a favourable basis because of the load conditions of the company in the United States.

- (b) Consumers' plan of operation contemplates as many points of interconnection with sources of supply as possible for the purpose of maintenance of supply in case of emergency. This is again similar to the operations of electric grid systems. Consumers' at present has connections with: (i) Iroquois Gas Corporation at Fort Erie across the Peace Bridge (under Government permits), (ii) Ontario Natural Gas Storage and Pipelines Limited at Lisgar (near Toronto); and (iii) the Queenston connection for the Niagara line with Tennessee Gas Transmission



Company. As an indication of the importance of this connection to Consumers', Trans-Canada agreed by letter dated October 5, 1956 to maintain this connection.

- (c) Consumers' realizes that in the interest of national defence the interchange of energy of all kinds (and specifically natural gas, not only because of its rapid energy availability, but because of its chemical constituents) on an immediate basis could be of the utmost importance. We respectfully suggest that a necessary emergency connection which is not otherwise used is an economic waste which with co-operation could be maintained by export and import on an economically beneficial basis.

In its comments under paragraphs (a), (b) and (c) above, Consumers' contemplates that it may be possible to negotiate the sale of western Canadian gas in New York State, with deliveries to be made from the Trans-Canada line on a firm and interruptible basis. This is a possibility, which it believes would prove beneficial to both Canadian and United States customers - all of course, subject to the recommendations of this Commission, the approval of Government boards, and Government policy.

Further in this connection, Consumers':

Hopes for development of an export policy which would encourage a continued development of



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Canadian gas and oil reserves with adequate protection of the Canadian market at competitive prices. An import policy for natural gas where it is of benefit to the nation to maintain competitive prices with the Canadian producer and an export/import policy that would assist in supplying natural gas service to communities on either side of the Canadian-United States border when such communities could not readily be served from their own country.

Suggest consideration of a permanent Canadian-United States International Commission for consideration of energy interchange and the export/import of gas on some "unit" basis related to the export and/or import of oil, coal, electricity, water, etc.

Since Consumers' is forecasting for 30 years it could be that the Commission may wish to consider the possible long term effect of the export and/or import of natural gas in frozen, compressed, or some other form to or from other countries of the world.

4. IMPORTANCE OF UNDERGROUND STORAGE FACILITIES

Among the more important factors affecting the efficient operation of a natural gas distribution company are volume sales at very low profit margin and the purchase of its gas supply at the lowest possible cost.



To obtain its gas supply at low cost it must be able to purchase it from the transmission company upon the most beneficial rate or combination of rates and "load factor" is the determining factor in the choice of these rates.

A distributing company may control its load factor and peak day control by:

- (a) Choice of or emphasis upon classes of domestic and commercial sales.
- (b) Use of the interruptible customers who may be curtailed or interrupted in periods of high demand.
- (c) Use of manufacturing facilities such as oil, gas or propane-air on peak days.
- (d) Use of line pack in large capacity lines, above-ground storage tanks, or underground storage in exhausted oil or gas fields, or other under-ground storage facilities. Underground storage may be compared with the large tank farms used in connection with oil pipe lines but on a much larger scale.

In a company such as Consumers' all of these factors are important for by their use it is able to purchase gas from Trans-Canada upon a better load factor, and Trans-Canada rate schedules benefit by lower rates those distributing companies that so operate as to be able to buy on the improved load factor.



These same facilities are very important to a company such as Consumers' in case of an emergency such as a line break on the Trans-Canada line, as by the use of them Consumers' could possibly disconnect from Trans-Canada's system either in full or in part, thereby helping Trans-Canada conserve its available supply for other customers. It is of course an understanding in the gas industry that in case of emergency all company boundaries are disregarded for the good of the whole.

Very early in Consumers' contractual negotiations it was apparent that underground storage would be vital to Consumers' particular operation to maintain it in the competitive market.

By the acquisition from owners in the United States of the majority stock of Provincial Gas Company Limited, Consumers' acquired both a larger market for interruptible gas and also a small storage area in Sherkston, good for approximately one and one-half billion cubic feet.

Then by its contract with Ontario Natural Gas Storage and Pipelines Limited it provided sizeable storage facilities both for the present and the future.

All of these operating factors should be of material assistance in assisting Consumers' to maintain the highest possible load factor and in turn should also assist Trans-Canada Pipe Lines Limited to



construct and operate its lines and facilities to their greatest economic value, both to the producing and to the consuming provinces.

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Consumers' favours development of a national energy policy on both a short term and a long term basis but with provisions made for continued or periodic review and revision in view of changing economic and military conditions.

Consumers' also suggests regulation of the transmission pipe line companies only to the extent necessary to comply with the national policy and safety, and not to the extent of the confusion and delay existing in the United States as a result of the present Federal Power Commission gas regulation.

THE CHAIRMAN: Thank you very much,
Mr. Jones. Mr. Pattillo.

MR. PATTILLO: Mr. Jones, at the top of page 4 you say:

"This is for the reason that by three party agreement dated April 2, 1954, Consumers' (Niagara) agreed that it would enter a contract with Trans-Canada whereby Trans-Canada would be its sole supplier, and as a consideration Tennessee Gas Transmission... would supply gas to Consumers' on an interim basis pending arrival of



Western Canadian gas in Toronto."

I am not sure that I clearly understand that contract. Why was the acquisition from Tennessee of gas in any way dependent on Consumers' committing itself to take its supplies from Trans-Canada when they became available?

MR. JONES: Consumers' had been selling manufactured gas made from coal and oil, and because of the cost of the raw supply and labour costs Consumers', at a period when Metropolitan Toronto was growing substantially by leaps and bounds, Consumers' was, because of the rates it had to charge, losing customers. On the one side the population was growing like this and Consumers' customers were going down like that. Consumers' felt the only way it could get its way back to the competitive market was by finding a natural gas supply. Prior to 1954 - - I believe it was around 1950 - - I have looked at my predecessors' notes - - it began to talk with people in Canada and in the United States about the natural gas supply. There was talk of a line coming from Western Canada down through the United States into this area, and there was talk of the all-Canadian line. Consumers' found it could get the gas from the United States, but it was in the national interest that it would be able to disconnect from the United States supply,



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6848

provided the Canadian supply became available. So Consumers' in its negotiations with the producers in the Southern United States - - I use "Consumers'" sometimes as Niagara, and if I use it, it is interchangeable and I apologize - - in its negotiations with the producers in the Southern United States, we made direct contracts with them and we made contracts with Tennessee Transmission to haul the gas to the Niagara River. Part of what we term consideration of this three-party agreement was that, while our contracts with Tennessee and the producers in the United States were for twenty years, that we would be released from the contracts as soon as Western Canadian gas was here. The purpose in wanting to get the United States gas as soon as we could was so that we could build the load here and we would get two or three years start on building the load in advance of the Western Canadian pipeline being built.



MR. PATTILLO: I can follow what you have said about Consumers. I can see how it wanted to be sure of a supply of gas and also wanted to be able to terminate that supply in the future; but where does Trans-Canada come into this thing? What is Trans-Canada giving to Tennessee to have Tennessee agree to permit Trans-Canada's gas to be taken from the gas which it was, presumably, transmitting at a profit?

MR. JONES: At that time, nothing that I know of. There was no Trans-Canada . . . -- I shouldn't say there was no Trans-Canada; there was nothing that I know of.

MR. PATTILLO: Would you be prepared to file a copy of that contract with the Chairman?

MR. JONES: Yes.

MR. PATTILLO: Would you please do that?

MR. JONES: You want to make it an exhibit?

MR. PATTILLO: Well, no, we won't give it an exhibit number; it will just be filed with the Chairman.

Now, while we have begun talking about this Niagara line, how important will the continuation of that Niagara line be to Consumers once we have Western Canadian gas in Ontario? I notice that you say in 1956 you got Trans-Canada to agree to continue the connection. Why?

MR. JONES: The line is of importance



to us -- that would be Consumers and Niagara -- because the Provincial Gas Company supplies the Niagara Peninsula -- it supplies the Fort Erie, Niagara and St. Catharines area -- and that is the line that, on the Niagara line, would extend from the Trans-Canada main system to supply those customers. The connection at the Niagara River with the United States, we felt, was of the utmost importance to us as an emergency connection.

We have no fear or doubt that the Trans-Canada line has been well engineered and well constructed; and we also believe, Mr. Pattillo, that they have done a remarkably good job in getting the line built as rapidly as they have. But we wanted to be sure that we had an emergency connection as close to our system as possible, because continuity of service to the customer is of prime importance to us, and we don't under any circumstances want to have interruptions; and that connection was, to us, an insurance.

Also, we did feel that there was a possibility that there could be an interchange of gas that could be beneficial to our company by the more economic use of the line, and we were trying to be as far down the road as we could to be sure, in our own judgment, that Trans-Canada would be able to sell gas to us at the cheapest possible price.

MR. PATTILLO: Does your ability to use



this line in the event of an emergency in any way depend on the interchange of gas from Canada to the United States?

MR. JONES: Does our --- ?

MR. PATTILLO: Does your ability to get gas from the United States in the event of an emergency in any way depend upon your ability, and Trans-Canada's ability, to export gas over their line to the United States?

MR. JONES: Not that I know of.

MR. PATTILLO: So that if no export permits were granted to Trans-Canada to export gas over their line into the United States you still would be protected and able to get gas by way of import in the event of an emergency?

MR. JONES: I think that is another question. I doubt it.

MR. PATTILLO: That is what we want to find out. Is there any agreement in writing? Is there anything we can look at to see what the position is?

MR. JONES: I don't know of any agreement between Trans-Canada and Tennessee, but I do know that we felt, when we received the letter agreement with Trans-Canada that they would maintain that connection, that they would have to make some kind of an agreement with Tennessee in order to make that gas available and to live up to their agreement



with us.

MR. PATTILLO: Would it be practicable to maintain the connection if the line was only used in the event of an emergency breakdown to Trans-Canada?

MR. JONES: No, not in my opinion.

MR. PATTILLO: It has to be constantly used to be a practical proposition, does it not?

MR. JONES: Yes.

MR. PATTILLO: Well, now, would you mind filing a copy of that letter agreement that you have referred to between Trans-Canada and Consumers?

MR. JONES: Yes, I would be glad to.

MR. PATTILLO: Now, where you have underground storage facilities such as you speak of, either your own, or where you have contracted for the use of them, does this emergency line bear the same importance to your operations as it would without those underground storage facilities?

MR. JONES: In my opinion, yes.

MR. PATTILLO: Would you explain that, please?

MR. JONES: If a break came in the Trans-Canada line between Hamilton and, we will say, St. Catharines, the supply of gas from storage of the Ontario storage people, and also the supply of gas from the Trans-Canada pipe line



would be cut off from the Niagara Peninsula; therefore the emergency connection with Tennessee would be the connection that would be immediately drawn on to supply that industrial, agricultural area.

MR. PATTILLO: So that even with storage facilities where they are presently situated you do need some other outlet to supply that area at certain times?

MR. JONES: I could go further, Mr. Pattillo, and say that if the break occurred in the main Trans-Canada line and we were calling on the Ontario storage facilities for their full capacity -- keeping in mind that the entire Eastern Ontario and the Montreal markets would be dependent on that supply -- in my opinion, the Tennessee connection could still be of value to assist in supplementing gas that would come out of storage, or some other sources.

MR. PATTILLO: Now, in your opinion, would the exportation of Canadian gas at Niagara in any way assist in reducing the cost of gas to Consumers and Canadian distributing companies supplied by Trans-Canada?

MR. JONES: Yes.

MR. PATTILLO: Would you expand that?

MR. JONES: The economics of a distribution system and a transmission system operation are very similar. Basically we try to use the capacity



of the system to the utmost -- 365 and 366 days per year -- and if you can sell interruptible, or, if I may use the term, seasonal -- "interruptible" is inclined to be a poor term -- seasonal or otherwise gas, you are getting money from it, even though it is only covering your income and cost and is not being carried under fixed charges.

MR. PATTILLO: Supposing you were put in this position, Mr. Jones, that you were told that the Niagara connection would not be kept unless Trans-Canada was permitted to export gas from Emerson, but you were told that if the Trans-Canada did export gas from Emerson the result was going to be that it would have to enter the producers' market and buy more gas at higher prices than prevailed before, and part of that increased price would be passed on to Consumers -- if that was the problem with which you were confronted what would your answer be?

MR. JONES: First, I would check to see if the statement made to me was correct, and if I found it to be correct, I would certainly be supporting anything to try to keep my costs down.

In that same close relationship, Mr. Pattillo, I think it is well to maintain a connection like that because there could come a time when another area needed needed the threat of competition -- and competition is what we are in --



the threat of being able to bring gas in from other sources could, perhaps, have a beneficial effect upon the law of supply and demand that exists in this country.

MR. PATTILLO: So if you were confronted with the problem that permitted the export of gas at Emerson, even although it was going to cost Consumers more you would still be willing to accept that if it meant that, without acceptance, you wouldn't have this Niagara connection?

MR. JONES: I think that the answer there is No. I must have misunderstood your first question.

MR. PATTILLO: This is the situation as we have it on the record: Trans-Canada, when it entered into its contract with the producers, anticipated a certain Canadian market and a certain United States market, and they bought their supplies for eighteen years on that basis. It now turns out that these boys of yours and others have upped the Canadian market very considerably, and, consequently, the gas they permitted themselves and contracted for is not going to be adequate for Canadian supplies alone.



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Accordingly, if they are permitted to export at Emerson they will have to go into the field and pay higher prices for that gas, they have fixed contract price for gas at Emerson and unless that was varied -- and there is no provision in the contract to vary it -- the only way they could operate would be by averaging, as Mr. Orme, one of the witnesses, said, the cost of the gas now under contract and the future supplies and the averaging would be imposed on all customers including Consumers, which would mean an increase in cost.

Now, on that factual picture, if you were told "Well, if that is the price of keeping my connection at Niagara for an emergency it is too rich"?

MR. JONES: That is right.

MR. PATTILLO: Too rich?

MR. JONES: Yes, sir.

MR. COMMISSIONER LADNER: What was the answer?

MR. PATTILLO: He said it would be too rich.

Now, I was not here on Saturday but I understand there was a little discussion about interruptible gas, and I happen to know, Mr. Jones, and you know that I do, that you know a good deal about interruptible gas. I wonder if



you would explain to the Commission what is meant by the term "interruptible gas", how it is operated by a distributing company and the benefits and reasons for it?

MR. JONES: Interruptible is probably a poor caption that has grown up in the industry, as many captions do. Interruptible gas is the end result, and although we use the term in our rates we do not start out with the idea of selling on that particular basis. Now, we think when we are talking about interruptible sales we are talking about gas that is available at a time when the system is not being used to its peak capacity, when the system is not experiencing its heaviest demand.

A good example, in my mind, is again here in Ontario where the Hydro has been so successful. The local Hydros sell water heating on the basis that they buy electric energy for water heating at a very inexpensive rate but whenever the electric system is at a period of peak demand, whether at eleven o'clock in the morning or midnight, or whatever time it is, they have a technical method by impulse, or something like that, that they can cut off these water heaters so as not to put that demand on the system.

We compare interruptible gas sales with exactly what the Ontario Hydro is doing in controlling their peak in the water heaters. We feel



interruptible sales are very similar to what the coal people do in the summer time. You can see ads now "Fill you bin in the summertime and save money." They offer a different price for the coal when their trucks and barges are not being used to capacity. The oil people do the same thing, they sell oil at lower rates when the demand is off in the off season.

Our propane competition does exactly the same thing with us so that the sale of off-peak or seasonal helps our thousands of customers by using our system to the greatest economic advantage.

We believe, and I have said this in talks to the Ministers of Mines conference, we believe that the use by us of interruptible helps the customers and also helps the Alberta producer or any other producer. It certainly helped when I was in the States for a while. It helps with the trunk line system because it means that, properly planned, it evens up the sale of the product throughout the twelve months' period, it brings a more even cash flow into the producer's hands.

We believe the sale of interruptible or seasonal gas helps the Canadian economy because it makes available to industry gas for certain operations at a price which otherwise would perhaps be beyond their reach. Along that line I see from



the most recent Gordon Commission Report where they talk about the advantages of natural gas and they emphasize the industrial plants that can use it to advantage because of their particular processes. We think that the price at which interruptible gas can be sold is helpful, therefore, to the overall Canadian economy.

We think sometimes, Mr. Chairman, that too much attention is paid and too much is made of price. We have constantly heard that and read it in the papers about price, and people do not buy gas on price alone, and this is true of the interruptible business. They buy it because it is a quiet, safe fuel. You can save money on the initial cost and in the use of it. It is a premium fuel with a lot of advantages, and I think the Gordon Commission recommended it in this extract which I have, so we feel by the sale of interruptible gas we are doing the same thing that the Ontario Hydro, the oil, coal and propane people, and anybody who is in a highly competitive business, is doing.

MR. PATTILLO: Does the sale by the distributor of interruptible gas or seasonal gas have a depressing effect on the price that the producer gets in the field?

MR. JONES: In our opinion, no. I would say it is the opposite way, that we are doing them a favour.



MR. PATTILLO: Because you are giving them a constant flow of business?

MR. JONES: We are giving them a market.

MR. FRAWLEY: I did not catch the last word.

MR. PATTILLO: A market.

MR. FRAWLEY: Oh, you are giving them a market?

MR. PATTILLO: Now, if I might move for the moment to storage, underground storage, would you explain what underground storage facilities are, how they are used, where they are found in this section of Canada, and what advantages they have?

MR. JONES: Well, natural gas sales become of such tremendous size that it is not economic to build steel gas storage tanks, or put in a series of pipes underground to store gas in. You would have to cover such a tremendously large area that we have to rule out, wherever possible, the use of above-ground storage. There are places, of course, in the country, in countries, where there is no underground storage, and then the peak days' load factor must be controlled in other ways.

The sale of interruptible gas is a part of the control of load factor. Underground storage -- the first thing that you do when you



begin to try to sell large quantities of gas is to look for storage, whether it is exhausted gas or oil fields, whether it is in other types of gathers, or where something else has been removed from the ground, but gas, if it has remained underground for billions of years until tapped for production in a storage field, then the theory is if you know all of the wells that have been drilled into that field originally to remove gas or oil, you know thereby the limits of the field and you can go back in, generally, into a field such as that, and inject the gas under pressure up to its original pressure and perhaps some more, depending on the type of sand you are storing in.

That, to our minds, when you find or locate by geological processes an exhausted -- not even an exhausted field where oil or gas has been removed, it makes the ideal type of storage.

Now, it does cost money to put gas into storage and take it out again, but you put the gas into storage in off-peak periods, say in the summertime, so it is available to draw it out of storage to be used in the wintertime. The ideal place for storage for Consumers' gas would be right on the outskirts of Toronto, but, unfortunately, there is no storage there, so we do the next best thing. That is, when we get the Provincial Gas



Company to provide storage. Their storage goes on fairly late and it goes out in kind of fingers, so we finally determined it would cost so much to develop that and it would cost so much that we looked around and found we could make a deal with the Ontario Storage or Union Gas Company for a portion of their storage reservoirs, because they have some very excellent storage reservoirs about the size we want to use, in Western Ontario.

MR. PATTILLO: Now, you spoke about the ideal place for storage location for your company. Does it follow that there is a geographical ideal for storage for large distributing companies?

MR. JONES: As near the market as possible.

MR. PATTILLO: In other words, for Trans-Canada there would not be any great advantage to it in having storage facilities in Alberta?

MR. JONES: We would still have to have storage facilities here regardless of Trans-Canada having storage facilities. We would still have to have storage nearby on the best load factor. We also think -- I might say this -- we think we are helping Trans-Canada and Trans-Canada customers, and thereby the producers, by our type of storage and our type of load factor.



MR. PATTILLO: I wonder if you would be kind enough to turn to your Exhibit 1 and pages two and three. You probably are aware that Trans-Canada came in with a forecast as to its Canadian markets when we were meeting in Calgary in February which I think rather overwhelmed everyone. We have subsequently been advised by Alberta and Southern, a company which is seeking to export gas to California, that they have had a market survey made of the Trans-Canada area, and there is no similarity whatsoever in the results they have achieved. We are going to hear more about that probably next week. But you say in your report, speaking for the areas which your company services, that you have made the survey based on your experience, and I was wondering whether you would tell us just how you do go about making an estimate of the market which you are going to have?

MR. JONES: Well, we start out by finding the population that is presently in the area and trying our best to forecast, based upon present growth and, with reasonable familiarity with what is happening in our areas, what will be the future growth.

In making these population forecasts, we talked with just about everybody that we think has anything to do with population forecasts, and,



unfortunately for us, we still find considerable disagreement between Federal Governments, Dominion Governments and Chambers of Commerce and Boards of Trade in forecasting population. But we finally decided that we could plot it, which we did. Then we know the number of customers, residential and commercial, that we would normally obtain, based upon population. Industrial, we go on the basis of the present industrial load and industries that will come into an area to supply growth of population in the country. We, after arriving at the number of customers, would then take an estimate of the number of those customers that would use what we term base load, that is for cooking, water heating, clothes drying and incineration, refrigeration, and then we would estimate the number of those customers that we would believe we could obtain for house heating. We don't have any idea that we are going to be able to take away all of the oil business from the oil companies, or from the coal companies or the coal business, or from the electric people or the electric business. They are businessmen too, but we believe we can get our share and take some of our business back just as they took business away from us when we were not pressing as we should have been. So we would arrive at the number of base load customers and then the number of heating customers, and, then,



based upon that number of customers, we would apply the degree days, which is the heating area, we would apply the base load unit consumption upon what we believe we could sell to those customers, and they would want to use, and we would multiply all that up and we would compare the final results we would obtain with the average annual consumption with, say, a residential customer. We do not either try to play on the conservative side or the other side; we take the figures as they were arrived at because they seemed to us reasonable figures.

MR. PATTILLO: And then you show in here the difference you come up with in your present forecast with what you had forecast in the past?

MR. JONES: Yes. Sometimes Trans-Canada gets slightly aggravated with us as a distributor because we seem to be constantly saying to them we are increasing our quantities. I can't say they get very aggravated.

MR. PATTILLO: Does it make any difference in the forecasting as to what per cent of your population is living in established areas and what per cent of population will be in new built-up areas?

MR. JONES: Yes, sir, it does.

MR. PATTILLO: And from your experience you have the factor that you apply to an established



area and getting customers to convert as opposed to a new area, and then go into and lay data lines and get them as original customers.

MR. JONES: May I ask a question on that? I just want to confirm my recollection on that. In the early years of our estimates we did use a different factor and when we found the two lines coming together in the later years we used just the average.

MR. PATTILLO: Now, when you are trying to work this out do you anticipate that you are going to have the same amount, same rate of growth in all categories of sales, that is, residential, commercial, industrial?

MR. JONES: Generally speaking, yes, sir.

MR. PATTILLO: And you have found in your experience in the business over many years that that is generally the way it works?

MR. JONES: Yes, but I should add, Mr. Pattillo, something that may have been missed in my letter, that we say we are in the business, that we set a goal on what we can sell. It is almost like the recent cigarette - I think Rothman's - they must have set a goal of the amount they want to sell, as by their promotional efforts and so on they will sell that quantity of cigarettes. The gas business is very similar; if we can get



the business we will sell the gas.

MR. PATTILLO: Nothing is impossible if you know what you want to achieve.

MR. JONES: Yes, and there is the concept that has come into this gas business now, that it is a competitive business, we have got to go out and sell.

MR. PATTILLO: I see a lot of people across the room who probably don't like you taking such an aggressive attitude.

MR. JONES: If we are half as good as the oil companies, we will be very happy.

MR. PATTILLO: I was going to ask you that question. You have probably read in the newspapers a great deal about the concern of the Canadian oil producers, or some of them, that they are not getting a greater share of the Canadian oil market. Now, when Trans-Canada gets to full operation and gas is coming down here in quantities contemplated, would you think that would have any effect on the market for the products of the oil industry in this area?

MR. JONES: I hope so. But I may add that I think there are other markets, as I pointed out in this letter - I hope you don't mind me calling attention to it. I have seen this magic barrel that the oil people have; I think it is two hundred different things or two fifty different things they



can make.

MR. PATTILLO: That is Mr. Frawley's barrel. He has never been able to find out what it costs.

MR. JONES: If they can sell heating oil, won't they sell more gasoline, won't they sell more Bunker C, won't they sell more chemical products? I think the first thing I ever studied in economics, I used the example of the sheep, and when the price of lamb was up the price of wool was down, and vice versa. We are concerned only that if there is any arbitrary pricing to prices out of the market.

Now, perhaps some oil should go to the United States. I have been reading in the paper recently of considerable agitation in the west because one of the refiners on the west coast was bringing oil from Borneo or some other place - anyway, some place out of the country. What I have reference to in the paragraph here about this International Commission which ends up on page 6, why shouldn't - if we have got some gas that the United States want and the producer here wants to sell in the United States, they have some relationship in the United States, why shouldn't the United States and refiners and others have to take certain quantities of oil, either of oil or some other of our products that they might not want to take? Perhaps it is called tie-in sales.



MR. FRAWLEY: Echo answers echo. Why not?

MR. PATTILLO: Well, I think you would agree, Mr. Jones, that if you are going to insist on that you would have to have a very high degree of regulation and control being exercised in the oil and gas industry, would you not? You would almost need a selling agent who would be able to say to the people who were coming from the United States, "We have the gas that you want, true, but we have a few other things in our hip pocket too and you have to take those".

MR. JONES: Including wheat?

MR. PATTILLO: Yes.

MR. JONES: And why not? Excuse me -- I did not mean to ask you a question.

MR. PATTILLO: That is quite all right. If I knew the answer I would answer it. Perhaps we could have a few minutes' break, Mr. Chairman. I am rounding up some more ammunition.

THE CHAIRMAN: We will have a break for ten minutes, gentlemen.

---(Short recess.)



THE CHAIRMAN: Gentlemen, we will now resume the hearing. Mr. Pattillo?

MR. PATTILLO: Thank you, Mr. Chairman. Mr. Jones, may I revert for a moment to interruptible gas? Many people hold that in offering your interruptible gas you are selling bargain-basement gas and that, as a result, the price that can be paid to the producer is depressed; is that correct, or not?

MR. JONES: No.

MR. PATTILLO: Would you please expand that?

MR. JONES: Consumers' sells interruptible gas purely to fill in the valleys caused by its contract for maximum day gas. We sell interruptible gas in competition with other fuels, but we do not just sell interruptible gas at a price in order to get business.

We think it is poor policy on the part of a company to have a pricing policy that calls for so-called dumping, and so whenever we sell interruptible gas it is not sold at a so-called bargain price. We try to sell interruptible gas many times for large industries in combination with firm gas, and we believe that in many instances we have been able to encourage the manufacture of products here in Canada, which would use gas, because of gas being a particularly useful type of fuel; just as there are certain products for which electricity is better, and other



products for which oil is better and other products for which coal is better.

We believe that by being able to sell interruptible gas, or to sell on an interruptible basis, we are helping to build the economy.

In fact, you can ask Mr. Lee how many times . . . How many times did we interrupt this last winter, Mr. Lee? Can you recall, approximately?

We interrupted, this last winter, approximately 25 different days.

MR. FRAWLEY: On 25 different occasions, or days?

MR. JONES: On 25 different days.

MR. PATTILLO: If you look at your letter at page 5, the first paragraph after the paragraph lettered (c):

"Consumers' contemplate that it may be possible to negotiate, for the first time, Canadian sale of gas in New York State, with deliveries to be made from the Trans-Canada line on the firm and interruptible basis . . . ".

Will you please tell us on what that comment is based?

MR. JONES: Well, Consumers' is in the business of selling gas, and gas service. Trans-Canada is in the business of selling gas service. The more gas that they can sell up to the capacity of their line the lower we hope that their offering



costs will be, and that we would, perhaps, share in some of those sales -- we don't have a contract for it -- if they can sell it for the lowest possible cost to us.

We were approached by some people in some of the industrial areas of New York State -- northern New York State -- and asked if we thought that it might be possible to get some gas from the Trans-Canada line when it came through there -- when it came through Ontario. We said: "Well, we believe that if there is some gas left over after Canadian markets are looked after we certainly would be glad to have Trans-Canada buy it." We asked Trans-Canada if we thought the people in Ottawa and others, if there was gas available--would there be any objection to even considering it; and subject to the recommendations of this Commission we believe that there is a movement whereby some firm gas could be sold and also some interruptible gas could be sold.

MR. PATTILLO: And you think that firm gas could be sold at a price, in New York State, which would benefit all Canadian distributors?

MR. JONES: We believe it could be sold at the take-off point of Trans-Canada at Trans-Canada's rate -- at Trans-Canada's current rate -- at Trans-Canada's pipe line rate to other distributors, and it could still be sold in New York State at a profit. It is not a large scale, though; it is quite a small service.



MR. PATTILLO: Those are all the questions I have, Mr. Chairman.

THE CHAIRMAN: Well, I want to follow on with one question before calling upon Mr. Frawley, if you don't mind, because it relates to this.

When the transaction was made originally of the purchase of Louisiana gas with the Tennessee Gas and Transmission, was it at that time contemplated that Tennessee Gas and Transmission would take this firm and interruptible gas about which you have just been speaking at the Niagara outlet?

MR. JONES: No; this has no connection at all with Tennessee.

THE CHAIRMAN: Wasn't it that Tennessee would like to get it for their system?

MR. JONES: No. New York State is not even in the Tennessee territory.

THE CHAIRMAN: Are there not large storage facilities in that part of the country?

MR. JONES: I am talking only about the New York State sale; that is what I have been talking about.

THE CHAIRMAN: So am I.

MR. JONES: Well, the New York State sale I am talking about, Mr. Chairman, is further along the line, up towards Cornwall; and Tennessee is not in the area at all. This has nothing to do with the Tennessee business.



THE CHAIRMAN: Was it contemplated -- and this is a different question -- was it discussed, or has it been contemplated, in relation to Tennessee Gas Transmission, that they would purchase gas for their system at Niagara?

MR. JONES: There is nothing that we have been able to do with Tennessee. We did think, Mr. Chairman, that in the maintenance of this Niagara connection . . . -- may I start over again? When we asked Trans-Canada for, and got, the letter agreeing to the connection at the Niagara River, we thought that Trans-Canada would probably have to make some kind of agreement with Tennessee to take some gas and not just maintain an idle connection there; but we are not involved, and I don't know that they have ever done it.

Were I in Tennessee's place, I would ask for some type of delivery -- I would ask for some flow one way or the other -- because to have a connection just lying idle is not economic.

THE CHAIRMAN: The question, then, has no relationship to Consumers' whatsoever?

MR. JONES: No.

THE CHAIRMAN: Thank you, Mr. Frawley?

MR. FRAWLEY: Thank you, Mr. Chairman.

Mr. Jones, you suggest that our gas might go to New York State, and that intrigues me. I wonder if you have examined it in this context:



Pacific Gas and Electric, through Alberta and Southern, has offered the Alberta producer a starting price at 14 cents at the wellhead. This gas you are speaking about going into New York State would be the gas that goes into the Trans-Canada line at the Saskatchewan gate at 10 cents; is that not right?

MR. JONES: I do not know, because this is not a sale that is even consummated; but it could be at a higher price than Trans-Canada would be paying for the gas.

MR. FRAWLEY: You wouldn't contemplate supplying New York State with some of this gas that the producer is getting 10 cents for?

MR. JONES: No.

MR. FRAWLEY: Or, 10 3/4 cents?

MR. JONES: I mentioned that as a possibility because I felt that we should lay before this Commission everything that we had in our minds that might happen at some future date.

MR. FRAWLEY: Well, Mr. Jones, so far as I am concerned I subscribe to the very thorough job you have done in doing that; but I put it to you that the Alberta producer would have some very strange thoughts about being told that he couldn't sell his gas to California at a rate of 14 cents because of the all-Canadian policy, and then finding out that some of the gas was going to New York State at a



lower price. Surely that wouldn't be acceptable, would it, Mr. Jones?

MR. JONES: Well, I am not a producer, so I don't know.

MR. FRAWLEY: It wouldn't to be acceptable to the producer.

MR. JONES: I am not a producer, so I am not in a position to answer.

MR. FRAWLEY: Now, Mr. Jones, you surely are broad-minded enough to reach out a little bit and just think what he would think about it. Surely that would be unacceptable.

MR. JONES: Sometimes I am not at all sure what the producer does think.

MR. FRAWLEY: That could be; that could be. Fortunately for him there are some people who, although they are perhaps doing it very feebly, are trying to speak for him to this Commission.

Now, Mr. Jones, I would really like to know something more about this Niagara contract, if I might call it that. I would like to know a great deal more about it. What Niagara did was that they went into the fields in the United States and made some prices directly with the producer; is that correct?

MR. JONES: Yes.



MR. FRAWLEY: At what price?

MR. JONES: The contract price is 16.4 cents with a one-cent Louisiana tax.

MR. FRAWLEY: Plus one cent Louisiana tax.

MR. JONES: Yes, 17.4 cents.

MR. FRAWLEY: Now, the 16.4 cents is the price at the wellhead, or is that gathered?

MR. JONES: It is gathered.

MR. FRAWLEY: That is gathered. Can you give us an average wellhead price or any wellhead price to compare with that?

MR. JONES: No, sir.

MR. FRAWLEY: That is a gathered price. Then you negotiated the services of the Tennessee Gas Transmission Company to bring that gas to the international boundary near Niagara Falls. What does it cost you when it gets to Niagara Falls?

MR. JONES: The average, Mr. Frawley, since the beginning of the contract, which would be November 1st, 1954, down to April 30th of this year -- the average cost including the 3 cents per thousand duty by the Federal Government of Canada -- we pay 3 cents a thousand duty on all gas we bring in -- the average is 44.04 cents. That is on a 15.025 pressure base.

MR. FRAWLEY: Do you have to pay the pipe line to bring it over where it enters the Consumers' line?



MR. JONES: That is a subsidiary of Consumers' that brings it.

MR. FRAWLEY: 44.04 includes that?

MR. JONES: 44.04 is at the delivery point but including the Canadian duty.

MR. FRAWLEY: It is not important to try and ascertain where it goes into your line at a place that I have heard in Sheridan? Is Sheridan where it goes in?

MR. JONES: Sheridan is where the Consumers' goes. Sometimes in Toronto some gas is being delivered to the Provincial Gas system.

MR. FRAWLEY: Some part of Consumers' is Ottawa ---

MR. JONES: Yes.

MR. FRAWLEY: You pay 44.04 cents at the boundary. That is gathered, of course, by F.P.C. permit?

MR. JONES: Yes.

MR. FRAWLEY: Do you have that permit with you?

MR. JONES: No, sir.

MR. FRAWLEY: Would you let us see that permit?

MR. JONES: Glad to.

MR. FRAWLEY: It is for twenty years, I think you said?

MR. JONES: Yes.



MR. FRAWLEY: Are there any conditions, any set-off conditions in it? I mean, to put that a little more clearly, anything written into that permit which refers in any way to conditions under which it may be set-off? Chiefly I am thinking of the receipt of Alberta gas in Toronto.

MR. JONES: No, there is nothing in the permit.

MR. FRAWLEY: Nothing of that sort at all. As far as the Federal Power Commission is concerned you can continue bringing in that gas indefinitely for twenty years? Now, dealing a little more with that, I was interested in the statement that you made. I would like you to explain it. You say as an indication of the importance of this connection to Consumers, Trans-Canada agreed by letter of October 5th, 1956, to maintain this connection. Have you got that letter, is it part of your exhibit?

MR. JONES: I told Mr. Pattillo I would be glad to submit it. It is simply a letter saying they will maintain the connection.

MR. FRAWLEY: Maintaining that connection and with a Federal Power Commission permit for twenty years, you can continue to bring gas in for twenty years?

MR. JONES: No, sir.

MR. FRAWLEY: What would require you to



cease bringing it in?

MR. JONES: My agreement with Tennessee and Trans-Canada.

MR. FRAWLEY: Just putting Trans-Canada aside, what agreement did you have with Tennessee which requires you to discontinue?

MR. JONES: We have the three-party agreement. I guess it is a four-party agreement: Niagara, Consumers, Tennessee and Trans-Canada were all party to it. We have the agreement when the Alberta gas arrives by all-Canadian pipe line but we would disconnect from our supply from the United States. That was made at a time, Mr. Frawley, when we thought Alberta wanted to sell their gas in the East.

MR. FRAWLEY: Do you think there is any difference now?

MR. JONES: I don't know. I was saying I hope it is still the same.

MR. FRAWLEY: Now, would you tell me, Mr. Jones, at what price, at any representative point you wish to choose, you sell interruptible and at what price you sell on a firm?

MR. JONES: The rates provided by the Ontario Fuel Board -- we have rate No. 6 for interruptible service.

MR. FRAWLEY: Rate No. 6?

MR. JONES: Yes. This paragraph on



rates, would you like me to read it?

MR. FRAWLEY: Yes, please.

MR. JONES: Mr. Chairman, shall I address my remarks to him?

THE CHAIRMAN: Yes.

MR. JONES: "The price for gas under this rate schedule shall be negotiated between the buyer and the company but shall not exceed 9.5 cents per Ccf net nor be less than 7.0 cents per Ccf. The price shall be negotiated on the basis of the following considerations: (a) the volume of gas for which customer is willing to contract, (b) the seasonal characteristics of the customer's anticipated gas consumption, (c) the load factor of the customer's anticipated gas consumption, (d) the cost of the facilities which the Company must install to provide service, (e) the term of the contract."

Rate No. 5 is our firm industrial service and the conditions I have just read to you are the same. The price shall not exceed $9\frac{1}{2}$ cents and not less than 7 cents per Ccf.

MR. FRAWLEY: Six and one-half cents per cubic foot?

MR. JONES: Per 100. You might say the range on interruptible is 40 cents a thousand to 65 cents a thousand, and on firm from 70 cents a thousand to 95 cents.



MR. FRAWLEY: These figures are rather important. Would you mind repeating that?

MR. JONES: Interruptible is -- I gave you it first in hundreds and I will give it to you in thousands -- is 40 cents net to 65 cents net.

MR. FRAWLEY: Forty cents to 65 cents. And firm?

MR. JONES: Firm is 70 cents to 95 cents. Each of those are on negotiated contracts with certain limitations on quantities.

MR. FRAWLEY: You call that firm industrial?

MR. JONES: Yes, we would be glad to give you copies of these rates.

MR. FRAWLEY: Now, then, have you got the figure you can give us for the cost of storing that per Mcf?

MR. JONES: No, sir, because the only storage we have is in Sheridan, which is only about a billion and a half storage, and it has not been worth while to keep detailed records, to keep exact costs. It is one of those things where the cost of keeping accounting records would have been uneconomical. Mr. Lee says he would rather not give a figure because in the short history we don't have an accurate figure.

MR. FRAWLEY: You cannot give us any



assistance with regard to Sheridan. You have made a contract with Union with respect to a storage field at Dawn?

MR. JONES: Yes, sir.

MR. FRAWLEY: Can you tell us what it would cost to store in that field?

MR. JONES: I can give you contract figures. We don't operate the field. I cannot give you the cost. I can tell you what it costs us.

MR. FRAWLEY: What it would cost Consumers, yes.

MR. JONES: From the time we deliver the gas to the Ontario Natural Gas delivery point, from the time it goes into storage and comes back out and is delivered back to us, we estimate it at $31\frac{1}{2}$ cents. None of that, Mr. Frawley, is interruptible gas. That is all firm gas. We would not use storage for interruptible purposes. We could not afford to.

MR. FRAWLEY: I would like to know, Mr. Jones, if the $31\frac{1}{2}$ cents Mcf is what you pay to Union in addition to what you pay for the gas.

MR. JONES: We have not paid anything yet.

MR. FRAWLEY: That would just be a fee or a charge to you?

MR. JONES: The cost to us, because, you see, we are buying under the 90 per cent load factor



with Trans-Canada to get the best load factor.
This is a way of controlling our peak demand.

MR. FRAWLEY: But your costs would be increased by $31\frac{1}{2}$ cents with respect to every Mcf you put in Union storage?

MR. JONES: The contract has been in effect since April 1st. I said we have not enough experience to give you the exact cost. This is what I estimate it to be.

MR. COMMISSIONER BRITNELL: I am not quite clear whether this is the cost of storing gas or the cost of gas plus storage.

MR. JONES: It is just storage from Lisgar over to storage. Lisgar is at the outskirts of Toronto. We deliver Trans-Canada to Lisgar. They take it through their line and put it in storage in Western Ontario. They must deliver back to that same point.

MR. FRAWLEY: From your experience in similar matters in the United States what do you say about that charge, whether it is high or low?

MR. JONES: That is a hard question to answer, Mr. Frawley. If you buy an automobile in the United States and if you buy the same car here it is another price. In my opinion, where we are located with a shortage of storage, I think the price is a reasonable price.

MR. FRAWLEY: This is about the only



storage in Eastern Canada that we have heard about up until now; is it not?

MR. JONES: It is the only storage we can find. That is why we made arrangements.

MR. FRAWLEY: I would be satisfied to say that if it is all you could find it is all there is.

MR. JONES: I should say we have other storages but this was the only developed storage. We wanted developed storage. Mr. Crozier mentioned yesterday other fields which could be developed, and we agree those could be developed.

MR. FRAWLEY: I thought Mr. Crozier was taking the attitude it was an unfortunate situation but Trans-Canada just did not have any storage except this storage that Consumers might contract with Union. That could hardly be called Trans-Canada's storage.

MR. JONES: He mentioned some other storage.

MR. FRAWLEY: You mentioned Mr. Crozier.

MR. JONES: Yes.

MR. FRAWLEY: The only developed storage is the Dawn storage, which belongs to Union Gas?

MR. JONES: Which belongs to Union Gas and on which we have a contract.

MR. FRAWLEY: In any event, it is probably the case of the application of the law of



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supply and demand as far as arriving at the $31\frac{1}{2}$ -cent price.

Now, you told Mr. Pattillo that exporting to the United States at Niagara would mean that Trans-Canada could sell to its deistributors, other than Consumers, at lower prices. I suppose that would mean you have economies to the Trans-Canada.



MR. JONES: I think the final question Mr. Pattillo asked me was, would I be willing to pay more - would I be willing to give up my connection that I had with Trans-Canada at Niagara if, because of the export liaison, I would have to pay more money for it.

MR. FRAWLEY: I realize that. I was more interested in just how you would set about effecting your export at Niagara, apart from the further question Mr. Pattillo asked about the export at Tennessee. You did say that you thought that would put Trans-Canada in a somewhat better position and they might be able to sell it cheaper to their distributor. I thought that was the import of your answer. Is that right?

MR. JONES: I don't think I would have said that, if I understood Mr. Pattillo's question.

MR. FRAWLEY: All right, I will start again. Will it have advantages, if any, to Trans-Canada if you were permitted to export at Niagara through Tennessee Gas Transmission system as some of the gas you were buying from Trans-Canada?

THE CHAIRMAN: Isn't that more properly a question to ask of Trans-Canada? How can this witness say what is the advantage to Trans-Canada?

MR. FRAWLEY: It might be I misunder-



stood the answer, because I had thought Mr. Jones had expressed a view about that, that it would mean cheaper sales prices by Trans-Canada.

MR. JONES: I don't think I said that in answer to that type of question.

MR. FRAWLEY: Did you say it at all in answer to any question?

MR. JONES: If you would repeat the question.

MR. FRAWLEY: With the Chairman's permission, I will ask again: Will there be any advantages to Trans-Canada if you people were allowed to export at Niagara?

MR. JONES: I would have to answer that by saying that at no time have we talked about Consumers' or Niagara exporting or selling gas to Tennessee at Niagara.

MR. FRAWLEY: Would you then export at Niagara to the United States?

MR. JONES: We talked about maintaining a connection for emergency purposes, that it would be uneconomic in our view to maintain a connection just for emergency, and we thought there would be an advantage if there was gas for export and import between Trans-Canada and Tennessee. To have an idle connection just for emergency purposes is not economic.

MR. FRAWLEY: Mr. Jones, is that 31½



cents per Mcf that you have to pay Union a price or charge that comes under any regulation by the Ontario Fuel Board or any other Ontario party?

MR. JONES: Well, we don't know, Mr. Frawley. Whenever there is any question, we always take the positive side and file with the Fuel Board a copy of any such contract. In fact, we were not sure whether the Ontario Fuel Board had any jurisdiction over Trans-Canada, and we filed a copy of our contract with the Fuel Board. We thought they were the ones we had to get along with.

MR. FRAWLEY: The Ontario Fuel Board had nothing to do with the making of the contract between yourself and Union?

MR. JONES: No.

MR. FRAWLEY: And whether or not you would have the right, you or Union would have the right upon complaint to have the Ontario Fuel Board adjudicate upon it, I understand that you don't know whether that is so or not?

MR. JONES: No, but I think I should clear that point in your mind, that we are operating on the basis that whatever is good for our company has to be something that is good for the citizens of Ontario and for the country as a whole. We are not entering into any contracts



is to see - I think it was Mr. Frost said the other day - to see that the companies get a fair deal, and the concept you are talking about of regulation is, I am afraid, the old concept of regulation. We take the new concept.

MR. FRAWLEY: I was just on the point of saying that that is what I thought about the concept. I am talking about the possibility of a complaint - you might be surprized - perhaps from the American coal operator. All I am putting to you is whether or not, as a fact as you understand it, the Ontario Fuel Board would be entitled to receive an application from any source to entitle it to adjudicate on that contract.

MR. JONES: Yes, I think it would be.

THE CHAIRMAN: I would like Mr. Jones' answer to that to be without prejudice to any subsequent position he may take. That is a legal question, and he had no legal advice.

MR. COMMISSIONER HARDY: Mr. Chairman, I wonder if I could ask Mr. Jones, if we concluded that this storage gas you had at the Dawn field - could you say that is all used for domestic consumption? Does it any more than take off the peak of your domestic consumption?

MR. JONES: I have to answer you, sir, that it could be for firm commercial and firm industrial, but it is very largely for the residential.



There could be firm residential and firm industrial to a small degree.

MR. COMMISSIONER HARDY: I realize you cannot scare the gas into the particular firms, but I think it is important that we know whether or not that storage gas could be used entirely in picking off the peaks of the domestic load. Your domestic price is probably around a \$1.30, isn't it, something of that order, the average household?

MR. JONES: We have a number of different domestic prices.

MR. COMMISSIONER HARDY: And certainly not down to 75 cents or 70 cents?

MR. JONES: If you would accept my answer that, yes, it is very, very largely for the domestic load. But if I answered you yes it wouldn't be technically correct because we do have restaurants, or hospitals, or schools, which are commercial.

MR. COMMISSIONER HARDY: What I am trying to get at, Mr. Jones, is this: How much of this storage could you economically use before you find yourself having to sell that gas down at 70 cents? At the present time - -

MR. JONES: We are using all of the higher-priced gas.

MR. COMMISSIONER HARDY: But how much



more could you use?

MR. JONES: We expect to be able to use all that the Union develops for our domestic load as our load grows over the years.

MR. COMMISSIONER HARDY: You didn't tell us about the capacity of the Dawn field. You told us you had an estimate of the Sherkston field and said you were not so sure about it.

MR. JONES: We start out at April 1st, 1958 to March 31st, 1959, and we have a maximum turnover of 3 billion, six hundred million cubic feet; in the year 1959 a maximum turnover of 4 billion, five fifty million; the next year 5 billion, six twenty million; the next year, 1961, 6 billion, six twenty million and the year 1962 to 1963, a maximum turnover of 7 billion, five hundred million.

MR. COMMISSIONER HARDY: Is that based on the capacity of the storage field or is it based on what you could economically use?

MR. JONES: What we could economically use. There is more storage available in the Union field. Our contract provides that we have an option on any storage that they develop or have available over and above daily plants, we have first call.

MR. COMMISSIONER HARDY: There is no economic incentive to go out and develop what Mr. Crozier called, I think, the Tilbury storage field?



MR. JONES: No, because this was the best deal we could find.

MR. COMMISSIONER HARDY: You don't want any more?

MR. JONES: At the present moment.

MR. COMMISSIONER HARDY: Well, it seems Mr. Crozier explained to us in his brief, Mr. Jones, that you had two mechanisms for ironing out your rate factor, and one was to sell an industrial interruptible and the other one was to get storage. Now, you explained to us how efficient your sales force was, and I have no doubt they are excellent sales people, but, speaking as an Albertan, I think you should call them off and put them on better storage; it would be in the better interests of the country at large.

MR. JONES: No, I think maybe you have the wrong impression. I can't see that. It takes both storage and interruptible to control your load factor, and since we are paying Trans-Canada a full price for all of this gas that was bought, and since the producer is paid the full price for all the gas there, all we do for storage and interruptible customers, to make it possible was to take that gas into the off-peak periods.

MR. COMMISSIONER HARDY: Yes, but then



you are using up all the gas resources of Trans-Canada at the price of 10 3/4 cents which they have now in order to balance out your load factor. Where they can't replace that gas at 10 3/4 cents, they are going to have to pay more, so the price to your domestic consumer is going to have to go up sooner because of your sale of industrial and interruptible gas than if you got the same protection through storage; is that not correct?

MR. JONES: No, I don't think it is.



MR. COMMISSIONER HARDY: Explain to me why it is not.

MR. JONES: Keep it in mind that we are selling interruptible gas only at those periods when we are required to take gas under our contract but have no other market for it.

MR. COMMISSIONER HARDY: You have a choice of selling it at this stage right there, selling it as industrial interruptible or putting it into storage if you had the storage.

MR. JONES: On a peak day in the winter-time we will have no interruptible customers on our lines, none, we will be taking gas from Trans-Canada at our full contracted demand and we will be using our storage to keep us from going over that contract demand. We will be using storage and manufactured gas to keep from going over that contracted demand. If we did not have storage we would have to have manufacturing capacity, either that or we would have to contract for lesser amounts. Now, if we are taking no interruptible gas on that peak day then we are taking interruptible gas only on the days when we are not taking gas to the amount we are required to under our contract. We are putting gas into storage to use on those peak days but I doubt if the producers or the pipeline company could afford to enter into a contract which would say "We will supply you with your peak day but in



the other times of the year you only have to take the quantity of gas you want to take".

MR. COMMISSIONER HARDY: We would not suggest that. What I am getting at is, you seem to be controlling this load factor, putting the emphasis on selling interruptible industrial rather than the emphasis on storage and Trans-Canada have told us, Mr. Orme told us here the other day, that the total estimated load with Trans-Canada is about one-third in interruptible industrial at these low prices.

MR. JONES: But it is on seasonable times, is it not?

MR. COMMISSIONER HARDY: I will simplify it: on your analysis, have you ever attempted a study as to the most economical way of operating your system as between expanding your interruptible industrial as opposed to expanding storage?

MR. JONES: Yes, sir, we tried to arrive at a balance.

MR. COMMISSIONER HARDY: Then, you think you have that balance?

MR. JONES: We think with this we have that balance.

MR. COMMISSIONER HARDY: And so it is someone else's job to pick up the additional available storage that you have in the east, you do not want any more at the present time?



MR. JONES: Yes, we have the option on this additional storage.

MR. COMMISSIONER HARDY: I mean other than the - -

MR. JONES: What I do not see is how to develop by Trans-Canada on large storage, cutting cost and putting gas into storage and taking it out of storage would help us particularly when we are buying from them on a 90 per cent load factor and I think from what I have read recently most of the customers are buying on the maximum load factor.

MR. COMMISSIONER HARDY: It looks to me like a deal for somebody, I note in these figures you are comparing your price at the maximum 65 cents at industrial interruptible plus 31 1/2 cents with what you sell at your domestic rate. You have a very nice spread in there or somebody has a nice spread in there.

MR. JONES: I do not quite see what you mean.

MR. COMMISSIONER HARDY: You are getting gas out of storage, you are prepared to sell it, you could have sold gas interruptible at maybe 45 cents to 60 cents, it costs you 31 1/2 cents in storage but that is gas that you are then selling as peak domestic gas.

MR. JONES: On a year-round basis.

MR. COMMISSIONER HARDY: No, as you



deliver that gas to the furnace, at the time you use it. That is what you are getting from that gas that you are taking out of storage.

MR. JONES: The residential customer generally uses gas for house heating, a very poor load factor.

MR. COMMISSIONER HARDY: That is the very point, that is the problem you have to look at.

MR. JONES: We have a poor load factor.

MR. COMMISSIONER HARDY: Yes, that is why you have to sell them this storage gas.

MR. JONES: Yes, and that is also why we have to get a higher rate.

MR. COMMISSIONER HARDY: Granted, but I am suggesting you have a pretty nice spread in that price -- that is really beside the point.

MR. JONES: I do not think it is because there is only enough spread, since we are regulated the way we are, there is only enough spread to take care of a return on investment. "Pretty nice" is a general phrase and we only have enough spread in there to make a return on our investment. We would be glad to settle for the spread that the other people have.

MR. COMMISSIONER HARDY: Mr. Jones, to go back to your question that you figure it would be -- with the sale of interruptible industrial you are doing a favour to the producer, should you not



really qualify that that you are doing a favour to the producer if he has a contract with Trans-Canada but at no other time? I cannot see that you are doing any favour whatsoever to the man who is sitting with some gas wells in Alberta and will not sell his gas to Trans-Canada because the price is too low or the man sitting in Alberta with the potential 14 1/2 cents or 14 cent-price where he can sell his gas in California as soon as he has a permit issued and the permit is not being issued because of the requirements of Trans-Canada among other things. What favour are you doing that man?

MR. JONES: I think we are doing him a decided favour. You use the term "too low". What is too low and what is too high? I was glad to see this Commission appointed because it seems to me that the gas is for the benefit of the country as a whole and not for the particular producer that happens to have found that gas and, therefore, if a price is, in his mind, too low perhaps for the good of the country, perhaps in this province from the cost that the Government can get that gas perhaps it is not too low.

MR. COMMISSIONER HARDY: How would you reconcile that analysis with a fact such as this, that for 100,000 B.T.U.'s of energy in the form of gas there is a certain income goes into the Province of Alberta; for 100,000 B.T.U.'s of energy in the



form of oil there is approximately five times the revenue goes into the Province of Alberta. Now, how would you reconcile the utilization of the energy resources on that price picture with this tremendous interruptible industrial load that you people are wanting to dispose of in this area at cheap prices, you say any price but the coal people will not agree with you.

MR. JONES: Well, I have to disagree with the coal people. I believe the coal people are going through today what we went through a few years ago when we realized that we had to get back into the aggressive business of being a service organization. But, take the price -- your specific question -- the price on a firm basis comparing oil, perhaps on that same basis we should all be using coal and the oil people should be shutting in all of their oil and gas.

MR. COMMISSIONER HARDY: They might settle for the use of oil.

MR. JONES: I cannot see personally -- again, the law of supply and demand, gas has to be delivered at a point and it has a certain value and gas has to be sold in competition at a certain value.

MR. COMMISSIONER HARDY: Why does it have to be sold at competition at industrial load, perhaps it should be saved for the domestic consumer?

MR. JONES: Gas has certain benefits to



the domestic customer and also the industrial customer, there are industries that are far better off to use gas than any other fuel the same as some should use electricity or oil. I do not think we should say to those industries, "We are sorry, you cannot establish a plant in Canada, you go ahead and continue to make your products in the United States and we will import them".

MR. COMMISSIONER HARDY: But that type of customer does not represent very much interruptible load, does he?

MR. JONES: But, again, interruptible load, we are paying the same price to Trans-Canada and Trans-Canada is paying the same price -- we are not buying interruptible gas, we do not buy interruptible gas, we buy gas -- we just buy gas from Trans-Canada on a contract, we do not buy interruptible gas.

MR. COMMISSIONER HARDY: And you have to sell at load factor but I cannot see on a national basis why we are justified in simply considering the gas industry as an isolated unit. Even if we leave out the coal, we have to write off the coal which my friend on the left may not agree with but here we are faced with the situation by which we have a huge market waiting for gas, Canadian gas and yet we have no market for the oil and we are being told in Alberta that the gas must be brought down here and



sold to displace the same oil that we already can't sell -- not a very good analogy -- more of the oil we cannot sell. Thank you very much, I do not think you can answer that question but that seems to be the problem.

THE CHAIRMAN: Thank you very much indeed, Mr. Jones, you and your colleagues not only for the manner in which you have appeared before us this morning and given your testimony but also for the great help which your submission to the Commission is going to be. We had at first anticipated that we only wanted you to give us your views on the marketing side for gas and I am afraid we strayed a little from that. Thank you very much indeed.

Mr. Pattillo, how long will it take to hear the submission from Interprovincial that you have planned?

MR. PATTILLO: I think Interprovincial is a matter of ten minutes.

THE CHAIRMAN: Then perhaps we had better adjourn now and reassemble at two-fifteen.

---(Whereupon the hearing adjourned at 12.30 p.m.
to resume at 2.15 p.m.



--- On resuming at 2.15 p.m.

--- Mr. Commissioner Levesque present.

THE CHAIRMAN: We seem to have collected more papers. Mr. Pattillo?

MR. PATTILLO: Thank you, Mr. Chairman.

I am proposing that we now have the supplementary statement of Interprovincial Pipe Line Company. Mr. Johnston and other officers of the company are here.

I want the document marked T-7-2.

THE CHAIRMAN: Is that the one in the cover?

MR. PATTILLO: Yes.

--- EXHIBIT NO. T-7-2: Submission of Inter-Provincial Pipe Line Company.

MR. PATTILLO: Mr. Johnston, would you please proceed?



Submission of
INTERPROVINCIAL PIPE LINE COMPANY

APPEARANCES:

T. S. JOHNSTON	-	President
D. G. WALDON	-	Treasurer
A. B. JONES	-	-

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MR. JOHNSTON: Interprovincial Pipe Line Company submitted a Brief and supplementary statement to the Borden Commission at its Calgary hearings in May, 1958. Since that time the question of supplying Montreal with Canadian crude oil has continued to feature prominently in the press and in general discussions. With the opportunity being afforded by way of these additional hearings in Toronto, Interprovincial felt that through a further brief statement it might submit additional information that could be of interest to the Commission. At the same time it is felt some data presented in Calgary could well be further emphasized. Accordingly the following is offered as representative of Interprovincial's opinion on a few basic points.

Interprovincial has been in operation since 1950. It has in eight years expanded its system to assure adequate transportation commensurate with



market demand. It submits that by enlarging its system in an orderly stepwise program it has achieved its purpose in the most economical manner and has today no intention of remaining in a static position. Today the Interprovincial system is approximately the equivalent of a single 30-inch line from Edmonton to the Toronto area. To replace the present Interprovincial system with a single 30-inch line and adequate pumping stations would cost approximately \$7.5 million more than has been expended by Interprovincial. In other words, it can be stated that the present Interprovincial system far from being uneconomical, is a modern, low-cost pipe line. It provides a service comparable to the lowest cost operating major pipe lines in North America. This fact is substantiated by periodic figures extracted from reports filed with the Interstate Commerce Commission in Washington, D.C.

Interprovincial indicated in its earlier submission that it had considered three possible routes for a pipe line to serve the Montreal market.

- 1) an extension of the present Interprovincial system from its Ontario section
- 2) an all-Canadian route
- 3) a take-off from the Interprovincial system in Northern Michigan crossing into Canada at the Sault and proceeding due east to Montreal.

From preliminary studies made up to the present time it would appear that the last route



mentioned above provides some advantage. If, as indicated at the Calgary hearings, the timing of a new pipe line to Montreal is important, within one year Interprovincial could by constructing a 34-inch line from the Sault to Montreal and by accelerating its already planned expansion program, be able to deliver 200,000 barrels of crude per day to Montreal at a cost of \$150 millions. In the same period of time this company would be able to supply the Ontario market with a further 100,000 barrels of crude per day at an additional capital expenditure of \$116 millions. It should be pointed out that these throughputs do not in any way limit the future capacity of the system since it would be quite practical and economic to take care of further expansion in both markets by additions to the pipe line system as the need required.

The above project is submitted as a possible step 1 in further expansion and is based on doing the job as quickly as possible.

Interprovincial is able to make this statement on the basis of being a pipe line company already well established with management and personnel immediately available. It further believes that it would be in a much more favorable position to finance such a project than a completely new pipe line company being established for this specific purpose



In Interprovincial's earlier submission to the Commission it was stated that it was this company's contention that for 150,000 barrels per day delivered to Montreal the tariff charged would be about 70¢ per barrel from Edmonton. Although it was stated in the evidence that the tariff would reduce as throughputs increased, Interprovincial gained the impression that to some extent this point was not given its correct prominence.

Therefore it is again submitted that the tariff on Interprovincial's expanding system would be comparable to that of any other system providing (1) volumes are the same, (2) assuming similar guarantees and (3) similar rates of return.

Minimum tariffs can only be achieved if capital expenditures are maintained at a minimum and throughputs maintained at or close to the carrying capacity of a pipe line system. To avoid expenditures on facilities which might not be utilized to the fullest for a period of years it seems only logical that a stepwise construction program always in line with expected market demand and long-term objectives, would be and is the prudent approach to such a project.

Possibly because the earlier hearings were held in Alberta considerable stress was laid on the movement of Alberta crude and the further development of production in that province. Interprovincial



believes that with this emphasis placed on Alberta it is possible that the movement of crude eastward from Saskatchewan and Manitoba may possibly not have received the consideration which is quite properly due production from these latter two provinces. Any pipe line which might be constructed to deliver western Canadian crude to the east, therefore, must be prepared to accept deliveries from any source and of any type commonly received by pipe lines.

THE CHAIRMAN: Thank you, Mr. Johnston.
Mr. Pattillo?

MR. PATTILLO: Mr. Chairman, I am not proposing to ask Mr. Johnston any questions.

THE CHAIRMAN: Mr. Frawley?

MR. FRAWLEY: I have no questions, Mr. Chairman.

THE CHAIRMAN: Thank you very, very much, Mr. Johnston for this additional submission. We do not propose to ask you any questions.

MR. JOHNSTON: Thank you for allowing me to submit this at this time, Mr. Chairman.

THE CHAIRMAN: Thank you.

Mr. Pattillo?



Submission of
OIL AND GAS CONSERVATION
BOARD
- - - - -

APPEARANCES:

I. N. McKINNON - Chairman

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MR. PATTILLO: I understand that Mr. McKinnon, Chairman of the Oil and Gas Conservation Board of the Province of Alberta is here today and that he has been instructed by the Government of the Province of Alberta, to place before the Commission a statement and survey of a study which has been made of the Government.

I would ask Mr. McKinnon if he would mind coming over before the microphone.

I propose, Mr. Chairman, that the statement be marked T-7-3, and that the study, which is headed "Forecast of the Canadian Demand and Supply for Crude Oil and Products, 1958 to 1965," and dated July 3rd, 1958, be marked T-7-4.

---EXHIBIT NO. T-7-3: Statement by Mr. McKinnon.

---EXHIBIT NO. T-7-4: Study entitled "Forecast of the Canadian Demand and Supply for Crude Oil and Products," prepared by the Oil and Gas Conservation Board of the Province of Alberta.



MR. PATTILLO: Will you please read the statement, Mr. McKinnon?

MR. MCKINNON: Mr. Chairman and Commissioners:

I appreciate this opportunity to present to you a "Forecast of the Canadian Demand and Supply for Crude Oil and Products" prepared by the Oil and Gas Conservation Board at the request of Premier Manning. He believes that this analysis might be of interest to the Commission.

The forecast reflects recent developments in the outlook for Canadian crude oil. I refer to the decrease in demand in the Puget Sound area and to reports that Venezuelan oil will supplant some Canadian exports to the United States Mid West. The Puget Sound market today is taking only 11,500 barrels per day of Canadian crude. In 1957 exports to this area averaged 75,000 barrels per day.

I know that the Commission appreciates the hazards in preparing this type of forecast. In making its analysis the Board prepared a basic forecast of demand and supply including exports to the United States which have been estimated on the Board's assessment of the current situation. The forecast also illustrates the effect on domestic production of:

- (a) a more optimistic approach in estimating the export demand, and



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6912

(b) the securing of a major portion of the
Montreal market.



You will note that the basic forecast provides a ratio of Alberta production to productive capability of 41 per cent in 1960. During the period 1958 to 1965 the ratios increase from 37 per cent to 48 per cent. In the opinion of the Alberta Government and from evidence given before your Commission, such low rates will not support a healthy oil industry. The effect of taking a more optimistic estimate of export markets adds a further one per cent to six per cent to these rates. The addition of the Montreal market, however, increases the ratios such that they range from 62 per cent to 68 per cent for the period 1961 to 1965 inclusive. These rates, while not generous are probably sufficient to maintain exploration and development at a reasonable level.

THE CHAIRMAN: Thank you very much, Mr. McKinnon.

MR. PATTILLO: Mr. McKinnon, I was just looking at this survey and study which I have not had an opportunity to examine. On page 4, including the title page ---

MR. McKINNON: The one entitled "Comparison of Production and Productive Capability"?

MR. PATTILLO: Yes. In the last set of figures below "Additional Demand Due to Pipe Line to Montreal", am I correct in thinking that is made up on the basis of all the Montreal market



would be reserved for the Province of Alberta?

MR. McKINNON: No, sir. I believe it starts off first of all in 1961 at 75 per cent and 80 per cent thereafter.

MR. PATTILLO: What I am thinking of is that all of the Montreal market supplied by Canadian crude would be supplied by Canadian crude from Alberta.

MR. McKINNON: That is what we have estimated here, Mr. Pattillo. We have taken into consideration the productive potential of both Manitoba and Saskatchewan. We have consulted with them in the figures that we have used for the Canadian potential other than Manitoba and Saskatchewan. I think you will see on the basis of the forecast that we have allowed for the potential of both Manitoba and Saskatchewan and then allocated to Alberta, you might say, the main demand. We anticipate that the additional demand would accrue to the Alberta producer.

MR. PATTILLO: Would you mind just pointing out to me where I find that?

MR. McKINNON: If you look at the left-hand corner of the page at the top, "Demand for Western Canadian Crude Oil", you will see Western Canadian production, excluding Alberta production, productive capability, shut-in capability and production. You will notice that we have



allocated for the total production of 451,000 barrels per day in 1958, we have allocated 154,000 barrels per day to Saskatchewan and Manitoba and the balance of 297,000 barrels a day for Alberta.

Then we have considered Alberta's potential on its own.

On the last page there are a few notes there which might be helpful.

MR. FRAWLEY: Perhaps Mr. McKinnon might read those notes into the record.

MR. PATTILLO: Yes, I think perhaps if he would.

MR. McKINNON: Notes re Forecast.

1. Demand for Canadian crude oil and products: The demand for each region in Canada was calculated on the basis of estimating growth rates. The Canadian demand was secured by obtaining the total of the individual regions.

2. Export demand for Canadian crude oil: The export demand was estimated on the basis of present day conditions, together with a reasonable degree of optimism. The bleak picture in the Puget Sound area was carried forward until 1960. From that point on it was assumed that Canadian crude would share in this market with other foreign supplies.

3. Productive capability:

(a) The productive capability of Western



Canada, excluding Alberta, was estimated on the basis of reasonable allowance for Manitoba and British Columbia. The estimates for Saskatchewan were based upon the brief of that province to the Borden Commission and resulting figures were discussed with representatives from that government.

- (b) In estimating Alberta's productive capability a range was established for the period 1960-1965. In order to simplify the calculations and tables for this forecast the mid-point of this range has been used.

4. Shut-in capability: This applies primarily to Alberta and Saskatchewan. In Saskatchewan figures were obtained of present shut-in capability and the assumption was made that there would continue to be a reasonable amount of shut-in capacity in Saskatchewan due primarily to the medium gravity crude oil. It should be noted of course that any reduction in this shut-in capability merely reduces the demand for Alberta crude oil.

Mr. Pattillo, may I explain on this note, too, I don't think it gives the right impression. "From that point on it was assumed that Canadian crude would share in this market with other foreign



supplies." I think the intent was we would share in all the refineries' requirements. At the present time it is limited to just one requirement.

MR. FRAWLEY: You are speaking of the Puget Sound?

MR. McKINNON: Yes.

Mr. Pattillo, if it would be helpful to the Commission I could produce the growth rates used for calculating the demand for each area.

THE CHAIRMAN: I think that would be helpful, because in some of the material we have had submitted to us it shows declining growth and others a steady increase in growth in Canada.

MR. McKINNON: I could read the notes, sir, under the following headings: Maritimes and Newfoundland, Quebec, Ontario, The Prairies, and British Columbia.

The 1958 figure under the Maritimes and Newfoundland was 7; Quebec, 6; Ontario, 8; The Prairies, 6; British Columbia, 6.

In 1959 the Maritimes and Newfoundland, 7; Quebec, 6; Ontario, 8; The Prairies, 7; British Columbia, 6.

In 1960, the Maritimes and Newfoundland, 7; Quebec, 6; Ontario, 7; The Prairies, 6; British Columbia, 5.

In 1961, the Maritimes and Newfoundland, 7; Quebec, 5; Ontario, 7, The Prairies, 6; British Columbia, 5.



In 1962, the Maritimes and Newfoundland, 5; Quebec, 5; Ontario, 6; The Prairies, 5; British Columbia, 5.

1963, the Maritimes and Newfoundland, 5; Quebec, 5; Ontario, 6; The Prairies, 5; British Columbia, 5.

1964, the Maritimes and Newfoundland, 5; Quebec, 5; Ontario, 5; The Prairies, 5; British Columbia, 5.

1965, Maritime and Newfoundland, 5; Quebec, 5; Ontario, 5; The Prairies, 5; British Columbia, 5.

THE CHAIRMAN: Those are cumulative percentages?

MR. McKINNON: Yes, sir. The percentage is based on the previous year's consumption.

THE CHAIRMAN: Yes. Mr. Pattillo, I don't suppose you are in any position, as counsel for the Commission, to ask Mr. McKinnon any questions in analyzing these figures. I don't think the Commission is either. I think after the figures have been studied, Mr. McKinnon, perhaps if we need further elucidation we could get in touch with you or some of your colleagues.

MR. McKINNON: Yes, we would be glad to furnish further particulars which the Commission wants.

THE CHAIRMAN: Thank you very much. We



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6919

appreciate very much Premier Manning sending this
statement through to us.



Submission of
INDEPENDENT PIPE LINE COMPANY

Appearances:

Mr. R. A. Brown, Jr.	- President, Home Oil
Mr. Ian Drum	- Chief Pipe Line Engineer, Home Oil
Mr. Douglas McDermid	- Attorney, Home Oil
Mr. Harry Thompson	- Vice-President, Montreal Engineering
Mr. D. R. Williams	- Vice-President, Dutton-Williams Bros. Limited
Mr. W. N. Gilliat	- Vice-President, Engineering, Dutton-Williams Bros. Ltd.
Mr. B. F. Crawford	- Consultant, Dutton-Williams Bros. Ltd
Mr. P. F. Clarke	- Partner, Lehman Bros.

MR. PATTILLO: Mr. Chairman, we now have come to the submission of the Independent Pipe Line Company.

The Chief Officer for the Independent Pipe Line Company is Mr. R. A. Brown, Jr. The Commission will recall that Mr. Brown appeared before the Commission when we were in Calgary, representing the Home Oil Company, of which he was the President, and other companies that were associated with him. At that time they submitted a proposal regarding a proposed pipe line from Alberta



to Montreal, giving alternate rates, one all Canadian and the other one partly through the United States. Since our last hearing I understand from Mr. Brown that a further study has been made, and some copies of it have been supplied to us, and he now is bringing this application to put this further study before the Commission in the name of the Company, which is, in fact, in existence, and which I gather he is proposing be the company to build this line.

Mr. Brown has supplied us with the statement, which I am proposing to have marked as T-7-5. I am proposing that the copy of the Engineering Report, which has been prepared by Dutton-Williams, be marked T-7-6. I would like Mr. Brown and his group to come forward.

---EXHIBIT NO. T-7-5: Statement of further study submitted by Mr. Brown, Home Oil Company.

---EXHIBIT NO. T-7-6: Engineering Report prepared by Dutton-Williams.

THE CHAIRMAN: Would you proceed, Mr. Brown?



MR. BROWN: Mr. Chairman and Mr. Commissioners. When I last appeared before your commission in Calgary I addressed you on behalf of a group of independent Canadian oil producers. On this occasion, owing to the shortage of time between the receipt of the Dutton-Williams Brothers report and the opening of your Toronto sittings, we have been unable to call a meeting of our group to obtain their concurrence in what I am presenting today. However I am confident this support will be forthcoming on my return to Calgary.

During the previous submission an effort was made to recognize not only Western Canada's oil surplus position but to relate it to the world oil surplus and to assess the effect of that surplus on the marketing of Canadian crude oil. We expressed our concern then about the deterioration of the export markets for our oil. Since that hearing, we have seen a further deterioration of our market in the Pacific northwest. We submit now that there is even greater urgency than there was only a few weeks ago to find a solution to our problem.

We stressed the desirability of maintaining and building a Canadian oil producing industry in the national interest. It was in that atmosphere that we sought to find a solution of the problem of increasing the markets for Canadian oil.



Resulting from the reports of A.J. Levy, Inc. on "Market outlets for Canadian Crude Oil - Problems and Prospects " and the Preliminary Engineering Report of Dutton-Williams Brothers Limited, we proposed to your commission the building of a 30-inch pipeline from Edmonton to Montreal via Sault Ste. Marie. We stated that this line could move oil from Edmonton to Montreal for 51.8 cents per barrel. This made it possible to put our Redwater crude into Montreal at \$3.16 per barrel. This compared with Venezuelan crude costing from \$3.07 to \$3.28 per barrel as represented by Montreal refineries and A.J. Levy Inc. Thus we established that it was economic and practicable to transport Canadian crude into the Montreal refining area in competition with Venezuelan crude oil.

During the course of the hearings we realized that an even greater service could be rendered to Canada if we were able to offer service to Inter-provincial Pipeline Company and reduce the transportation burden to Ontario refineries. With this in mind we commissioned Dutton-Williams Brothers to undertake further studies and I am pleased to submit their further report today to your commission. I suggest that this report suggests a practical and very real solution to the problem of moving Western Canadian crude oil to eastern markets.

With your permission I will now read the letter of transmittal from Dutton Williams Brothers



dated June 20, 1958, accompanying their report.

June 20, 1958.

Independent Pipe Line Company
304 Sixth Avenue West
Calgary, Alberta.

Gentlemen: In accordance with your recent instructions, we have prepared the attached Preliminary Engineering Report on the proposed Alberta-Montreal Pipeline crude oil system. We believe the report sufficiently examines the factors involved and adequately defines a system for planning purposes.

The purpose of the proposed system is to transport western Canadian crude oil to the Montreal refinery area, and in addition, to provide service to the other principal eastern Canadian refining areas now served by the Interprovincial and Lakehead System via a suitable interchange of shipments. You have furnished to us, as developed in separate studies, estimates of market requirements, sources of crude and future shipments which were used as a basis for the system's functions. You have also furnished us estimates of the quantities which the Interprovincial-Lakehead System can be expected to transport.

A. Conclusions:

1. A pipeline system incorporating the efficiencies of large diameter service will offer substantial transportation cost improvement for western



Canadian oil movement to eastern Canadian refinery areas.

2. It will be possible for western Canadian oil to reach Montreal at an economically favorable transportation cost.
3. The system to accomplish the above can be effected on a basis compatible with the Inter-provincial Pipeline System.
4. The system recommended as a result of the studies based upon the above conditions considered, consists of a 36-inch pipeline from Edmonton to Superior and a 34-inch pipeline from Superior to Montreal. A 10-inch and 16-inch spur line would connect the Calgary area to the Bellshill Lake junction point, 100 miles east of Edmonton.

This system appears to offer the most economical transportation and also the best balance between investment and operating cost for the future throughputs predicted. The system provides unique flexibility in being able to accommodate variations in the patterns of growth of crude demand in the Montreal and Toronto areas.

In selecting the recommended system, a number of possible sizes of the main pipeline and possible routes were considered. The cumulative capital requirements of the selected system for 1961 and 1970 are summarized as follows, reflecting growth of the system.



	1961	1970
Construction Cost	\$ 370,001,000	\$414,553,000
Interest During Construction	14,568,000	15,738,000
Working Capital	1,625,000	1,625,000
Financing Cost	8,941,000	8,941,000
Total	\$ 395,135,000	\$440,857,000

5. Based upon the estimated capital requirements and operating costs for the recommended system, the Cost of Service per barrel transported during 1964, the fourth year of operation, is 22.2 cents to Superior, 39.6 cents to North Bay, and 48.1 cents to Montreal. I should point out that the 48.1 cents is the total cost to Montreal, the 39.6 cents the total cost to North Bay, and 22.2 cents the total cost to Superior. Cost of Service in this case includes depreciation, interest, operating cost, return on investment and income taxes.

The Cost of Service is based on the above mentioned estimates of throughputs. These throughputs have not, however, been compensated for (1) seasonal variations in refinery demands below capacity, (2) unforeseeable competition in serving the areas considered, and (3) variations in the predicted gradual marketing growth due to temporary fluctuations. Therefore, the derivation of a tariff from the theoretical Cost of Service mentioned, must consider these factors in addition to the actual throughput agreements obtainable.



B. Report Summary:

1. The initial capital requirements for the recommended system amounts to approximately \$395,000,000 of which \$370,000,000 is attributable to the cost of installation.
2. The table below shows pertinent data on the system derived for 1961 and 1970, the expected initial and tenth year of operation.

	<u>1961</u>	<u>1970</u>
Main Line Pipe, 36-inch	973 Miles	973 Miles
Main Line Pipe, 34-inch	946 Miles	946 Miles
Gathering Line, 36-inch	100 Miles	100 Miles
Gathering Line, 16-inch	71.5 Miles	71.5 Miles
Gathering Line, 10-inch	73.5 Miles	73.5 Miles
Steel Tank Storage	2,123,000 Bbls.	3,486,000 Bbls.
Installed Station Horsepower	23,000 HP	193,000 HP

Design Throughputs

Bellshill Lake to Superior	259,000 BPD	733,000 BPD
Superior to North Bay	229,000 BPD	527,000 BPD
North Bay to Montreal	229,000 BPD	410,000 BPD

Some of the exhibits in the report show the results of initial operations in late 1960, based on an average throughput to Montreal only of 200,000 BPD corresponding to a design throughput of 204,100 BPD. These figures are illustrative only, as 1961 has been assumed the initial year of operation.

The 1960 operating figures are included to show the theoretical effect of beginning operations in the fall of 1960, if the pipeline system were completed by that time. In order to insure a full



1959 construction season, detailed engineering should commence as soon as the regulatory and financial arrangements will permit.

C. Preparation of the Report:

Route reconnaissance was made by automobile and aircraft over the various possibilities, resulting in the final selection shown on the Route Map following. Critical points were checked at the sites and alternate sections were evaluated. Detailed notes of a number of previous investigations over the entire area were also of assistance, as were actual construction cost information on the several existing pipeline systems which parallel some parts of the route considered.

Pipeline route locations were made with the use of aerial photographs and topographic maps and based upon the reconnaissance notes.

Hydraulic studies of the various routes were made after profiles were developed from the above information. Schematic arrangements of a number of alternative designs and routes were then produced. On the basis of preliminary cost estimates, a number of the alternatives were then eliminated. More exact cost estimates were then compiled for remaining alternates using quotations from manufacturers and other realistic data.

Operating costs then were prepared which reduced the alternative schemes then deserving further comparison.



Financial requirements have been developed for the selected system to determine required income over the period of years from which the Costs of Service were selected. These Costs were then used to project pro forma financial data for the future years of operation to test their adequacy.

Volume IC is generally arranged to begin with the premises, followed by a design discussion, and concluded with the financial data derived therefrom. Volume II defines the system recommended in specification form suitable for incorporation with later detailed drawings and final bills of materials into complete plans and specifications of the system.

It is hoped that the report contains design decisions and definition of the system sufficient to effect the final planning of this project.

Respectfully submitted, DUTTON-WILLIAMS
BROTHERS LIMITED.



Mr. Chairman, there are two or three highlights in the body of the report that I think might be interesting to put on the record. Do I have your permission to skim through them quickly?

THE CHAIRMAN: Yes, certainly.

MR. BROWN: A. INTRODUCTION.

1. Function of the System: The primary purpose of the proposed Alberta-Montreal crude oil pipeline is to provide the most economical transportation for the proven and potential oil reserves in western Canada to the Montreal refining area. It has been further stipulated that this purpose shall be accomplished (1) in a manner compatible with existing investments in pipeline system, and (2) without jeopardizing the investments in eastern Canadian refineries by unduly disturbing present refinery marketing patterns.

Present outlets for Alberta crude consume less than 50 percent of the rated production capacity. Reserves due to new discoveries are increasing at a rate greater than the potential consumption of present markets. Therefore the proposed system connects the Montreal market to a secure and ever adequate source of production. In so doing it effects an improvement in transportation to eastern markets presently connected to this source.

a. The Montreal Market: The Montreal area imports a substantial amount of foreign crude at a



cost representing about one-third of Canada's trade deficit. A foreign source of such crude is subject to variations in world affairs and upon ocean transportation. This factor may be critical in case of a world or Canadian national emergency.

Present crude oil transportation from Alberta eastward, which might be extended to Montreal, is operating at such capacity that it could not serve the Montreal market in any quantity without a corresponding reduction in its present service to other points.

Montreal is the only market area remaining in Canada with sufficient demand to substantially utilize shut-in reserves in Alberta. Export of these reserves to the United States is continuously dependent upon the prevailing import policy of the United States to protect its own producers, and continuously dependent upon prevailing competitive prices of foreign crudes which may be imported without field proration at the source.

b. Other Eastern Canadian Markets:

Other eastern Canadian markets include the Great Lakes, Toronto and Maritime areas. Except for the Maritime area, these markets are presently served by the Interprovincial-Lakehead Pipeline system, referred to as Interprovincial.

By virtue of a system built in stages west of the Great Lakes, Interprovincial today



exceeds economic optimum capacity from Edmonton to Superior. However, additional throughput can be accommodated in the 30-inch Lakehead section from Superior to Sarnia. The 20-inch section from Sarnia to Toronto can assume limited increases in Toronto demand.

A large-diameter express pipeline with the primary purpose to serve Montreal is well suited to the secondary purpose of enhancing Interprovincial's service to these markets. By interchange shipments to Interprovincial at Superior, the excess capacity of Interprovincial's Superior-Sarnia pipeline and combined tariffs to Sarnia from Alberta should offer economic advantage to both refiners and producers, and to Interprovincial as well.

When Interprovincial's facilities to Toronto exceed the optimum capacity, Interprovincial may then elect to construct a lateral from the Alberta-Montreal pipeline at North Bay to serve more economically the further growth of the Toronto area. The ability of the large main trunk pipeline to accommodate the added shipments for delivery at North Bay is one of the advantages of the proposed system.

The Alberta-Montreal pipeline, in case of emergency, could be used to supply or supplement tanker deliveries to the Maritimes. The pipeline would drastically reduce imports into Montreal, allowing the Portland-Montreal pipeline to be reversed



to load tankers at Portland for Maritime shipments.

Detailed studies of acceptability of Canadian crude in the Maritimes have not been undertaken because of these factors. (1) From preliminary estimates, the delivered price of Canadian crude in the Maritimes is at least 20 cents per barrel more than the delivered price in Montreal. (2) Since the Alberta-Montreal pipeline effects a competitive price for Canadian crude with imported crude in Montreal, Canadian crude is therefore at a price disadvantage in the Maritimes.

Thus the large-diameter express pipeline from Alberta to Montreal can offer (1) substantial savings in transportation of Alberta crude oil to eastern Canada, (2) a feasible means of utilizing Canadian crude in Canadian refineries, and (3) compatibility with Interprovincial by serving the excess of its marketing demand through interchange shipments.

2. PURPOSE AND SCOPE OF THE REPORT.

This report has been prepared under the instructions of Independent Pipe Line Company. The report summarizes results of route reconnaissance and planning studies undertaken to determine an economical crude oil transmission system from Alberta to Montreal.

The purpose of the report is fivefold.

- (1) To recommend a mechanism whereby low cost transportation of crude oil can be made available



to eastern Canadian markets in addition to Montreal.

- (2) To define the system derived from field engineering and economic studies as appearing most feasible for present and future indicated needs.
- (3) To supply realistic estimates of the system investment and operating costs.
- (4) To furnish an estimate of required annual income and the Cost of Service for transporting oil to the various delivery points per barrel of estimated shipments.
- (5) Examine the engineering and economic aspects sufficiently to facilitate all major planning decisions that will permit detailed engineering and construction to proceed without delay.

Certain aspects of the feasibility of the system are beyond the scope of this report, and beyond the assignment therefor. These include:

- (1) A discussion of the reserves in Alberta or more particularly the adequacy or selection of certain fields or areas in Alberta to satisfy pipeline throughput premises, or the designation of gathering points.
- (2) Evaluation of the Montreal market as an outlet for Western crude oil.
- (3) Evaluation of the future demand for crude oil in eastern Canada.
- (4) Evaluation of the effect of the Costs of Service



derived in this report upon competitive marketing, or upon the economics of production.

It is understood, however, that the foregoing aspects have been or will concurrently be treated in reports by others.

B. PREMISES OF PIPELINE SYSTEM.

1. Discussion of Demand: As previously stated, it is beyond the scope and assignment of this study to develop the demand or supply aspects of crude oil for this system. However, throughput requirements in general were derived as outlined herein.

a. Montreal: From the recent study by petroleum economist, Walter J. Levy, the demand for foreign crude oil and products in the Montreal area for 1960 is estimated to be 282,000 BPD and 32,000 BPD respectively. (See Pages 1-12, Levy report.) It has also been estimated that the Alberta-Montreal pipeline could supply replacement of 70 per cent of this crude oil market, or 200,000 BPD. (See Page 2, Purvin & Gertz report.)

Present Montreal refiners operate on crude stock averaging 31° API gravity (at 60° F), composed principally of Venezuelan and Middle East crudes ranging from 25° API to possibly 35° API. Alberta crudes tentatively selected to serve Montreal have an average gravity of about 35.5° API at 60° F.

Complete utilization of a lighter charge stock would effect a further deficit in heavy fuel



oil supply in the area. It has therefore been postulated that additional limited imports of either heavy crude or residual fuel oil would occur. The imminent availability of natural gas in the Montreal area should have a mitigating effect on the demand for residual fuels.

Some of these and other considerations are treated in detail in the Levy and Purvin & Gertz reports. However, the considerations briefly mentioned above substantiate the fact that about 70 per cent of the 1960 Montreal demand for crude oil could reasonably be satisfied by Alberta crudes, and a higher percentage thereafter.

The Levy report (Pages 1-16) further states that in 1965 crude oil demand in the Montreal area would reach some 396,000 BPD with no products imports required. It is assumed the Alberta-Montreal pipeline could capture 80 percent of this market, or 320,000 BPD, in light of the foregoing discussion and more detailed analysis. The throughput build-up in the pipeline between 200,000 BPD in 1960 and 320,000 BPD in 1965 is assumed as a straight line to obtain annual increments.

After 1965, it is assumed that Canadian crude oil can supply 100 percent of the increase in Montreal requirements at the 1960 to 1965 rate of demand growth. In 1960, a total of 314,000 BPD of crude oil and products demand is projected as



previously stated. The 1965 demand is similarly 396,000 BPD -- an increase of 82,000 BPD in five years. This annual increase of 16,400 BPD has been used to extrapolate the demand requirements in Montreal for Alberta crudes through 1970.

b. Other Eastern Canadian Markets: In order to facilitate derivation of reasonable throughput projections to other eastern Canadian markets, Montreal was included in the analysis as derived previously. However, the Maritime refining areas were excluded as too speculative.

Sir, I shall not read Table IV on page 9, but the total Canadian demand might be a figure of interest: in 1960, 719 MBPD; in 1965, 1,034 MBPD; in 1970 1,328 MBPD.

Sir, could I ask you to turn to page 15, Table VIII? I would just like to read a few years figures out of that. It shows the Independent Pipeline projected throughput in thousands of barrels per day. In the year 1960, Alberta-Superior 200,000 barrels a day; delivered at Superior, no barrels; Superior-North Bay, 200,000 barrels; delivered at North Bay, no barrels; North Bay-Montreal, 200,000. In 1966, the number of barrels Alberta-Superior is 517,200; delivered at Superior, 113,200; Superior-North Bay, 404,000; delivered at North Bay, 67,600; and North Bay-Montreal, 336,400. The final figure which I thought might be interesting is for 1970:



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Alberta-Superior, 718,000; delivered at Superior,
202,000; Superior-North Bay, 516,000; delivered
at North Bay, 114,000; North Bay-Montreal, 402,000.



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I would ask, sir, to turn for a moment
to page 98 - "Financial data".

1. DISCUSSION

a. General Outline

In the ensuing pages the following state-
ments are submitted for the entire line
from Alberta to Montreal as a whole:

Summary of Costs
Pro Forma Statements of Income and
Expense
Pro Forma Balance Sheets
Pro Forma Statements of Cash Receipts
and Disbursements

Thereafter appear the following schedules
in support of the Pro Forma Statements,
which are based upon the three individual
segments of the line.

Cost of Service
Capitalization
Fixed Assets and Depreciation
Debt Service

b. Assumptions

The assumptions and methods employed in
compiling these schedules include the
following:

Construction costs are, of course, set out
earlier in this report.

Interest during construction is computed
on the amount of construction at 5.25 per
cent per annum for nine months in the case of
the 1959-60 construction period and for six
months for later additions.



Working capital has been provided in amount equal to 90 days, or 25 per cent, of the 1964 operating expense.

Finance expense has been computed on the several individual securities to be placed or sold. Such costs average 2.07 per cent of the capital requirements exclusive of that for finance expense. These costs are patterned closely to the cost of recent issues of comparable new companies.

I think, sir, I might return to my statement on matters relating to the further financial assets of the company so that they will be available for questioning.

The lower cost of service of 48.1 cents per barrel would permit us to land Redwater crude into Montreal for \$3.145 cents per barrel. This compares with Interprovincial Pipeline's tariff of 44 cents per barrel to Superior, 64 cents to Sarnia and 72 cents to Toronto.

I would now like to deal with the effects of our proposal to build this super-inch line to Montreal.

(a) The Competitive position of Redwater oil in Montreal has been established.

(b) Through modification of our original proposal, that is the increasing of the line size to 36 inches for the Edmonton Superior segment and



to 34 inches for the balance to Montreal, we are able to offer super-inch efficiency to Ontario as well as to Quebec. Our cost of service to Superior is probably lower than Interprovincial's cost, that is operating and administrative expenses, interest and depreciation. Similarly future accommodation at North Bay is available through the 34 inch line. This increase in line size permits delivery of a large proportion of the Ontario crude demand at transportation costs of 2.0 cents per 100 barrel miles compared to the present - - or Interprovincial's - - 3.6 cents. At the same time transportation costs to Montreal are decreased.

By transporting the incremental growth load for Interprovincial, Independent facilitates maximum use of Interprovincial's system. This naturally results in a notable increase in Interprovincial's annual barrel mile figure. This combination service offers Canada the best mechanism of lowering the unit transportation burden involved in marketing Western Canadian crude oil.

(c) This new line will make it possible to deal with the whole Ontario-Quebec market as a unit and the benefits of lower cost transportation to the whole area is I am sure apparent.

With your permission I would now like to bring to the attention of the Commission some areas of possible disagreement with this proposal.



(a) Projected volumes of throughput.

The tariff required to be charged in any given pipeline system is a direct result of the volume of daily shipments through the line. In making our market projections we used those contained in the W. J. Levy report. We believe that they are a reasonable forecast of future requirements for oil in eastern Canada. In order to assist the commissioners in their thinking regarding volumes of throughput and resultant tariffs, we asked our engineers to reduce Levy's projected market by 10 per cent and they have advised me that this would increase the Edmonton-Montreal cost of service by 5.5 cents per barrel to 53.6 cents which would permit a laid down cost of Redwater crude into Montreal of \$3.20 per barrel. This remains an economic movement of oil.

(b) Financial feasibility

Independent's financial advisors are present here today to deal with any matters relating to financial feasibility, guarantees, etc.

(c) What is required of Government.

We realize that our proposal requires some form of Government support. In order to maintain and develop our domestic industry in a period of world oil surplus we submit that the Government of Canada should declare that a large percentage of the oil refined in Montreal should be of domestic



origin and in addition that product imports be minimized. This of course involves a form of import quotas but we have no fear that this will result in the industry being excessively regulated by the federal government. Rather we feel that the federal government has a responsibility to take the steps that are necessary in order that the most effective economic use of Canadian energy resources may be achieved for the benefit of Canadians.

Benefits to the Oil Industry of Canada of serving the Montreal market with Western Canadian crude oil.

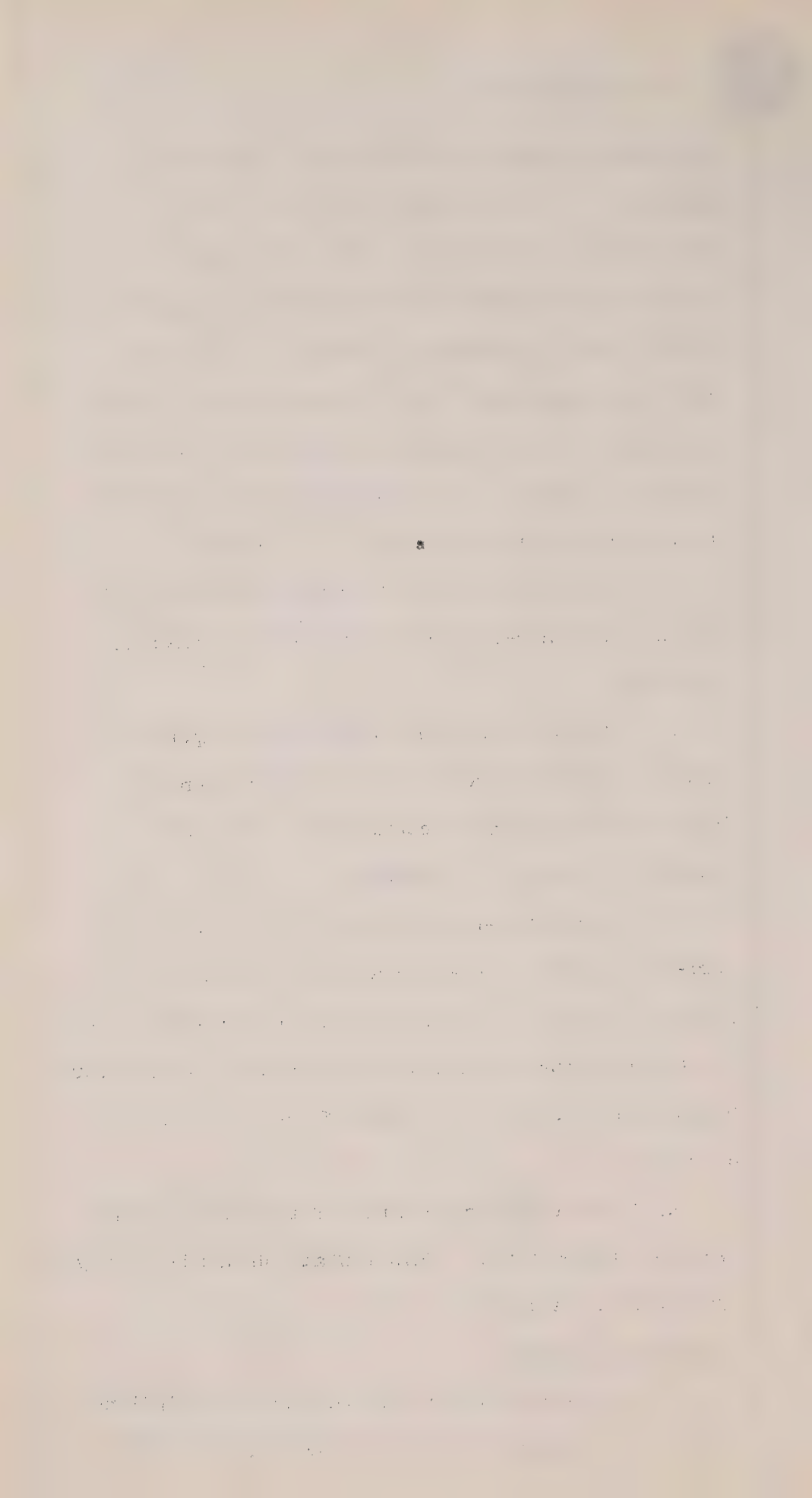
1. The most immediate and perhaps important benefit would be related to the reinstatement of incentives necessary to continue to build and develop a domestic oil industry.

2. Supplying approximately 1,175,000,000 barrels of oil to the Montreal market during the 10 year period 1961 to 1970, assuming the present price of Redwater crude, would be worth about \$3,460,000,000 which would otherwise be expended in U.S. dollar currency.

3. The steel requirements of this new pipeline exceeds 700,000 tons. This tonnage should be mainly available in Canada.

Financing Proposal

It is considered that the proposed pipeline should be primarily an industry facility and that





the refiners and producers should be the main supporters and owners of the project. It is also considered adviseable that the Canadian public should be invited to participate in the financing.

No specific formula has been suggested for a division as between the foregoing as it is felt that this is a matter of negotiation.

Thank you, sir.

THE CHAIRMAN: Thank you, Mr. Clark.

I suggest that we have a 10-minute break.

--- A short recess.



MR. PATTILLO: Now, you say on page 2
of your Statement:

"The lower cost of service of 48.1 cents per barrel would permit us to land Redwater crude into Montreal for \$3.145 cents per barrel. This compares with Interprovincial Pipeline's tariff of 44 cents per barrel to Superior, 64 cents to Sarnia and 72 cents to Toronto."

Dutton-Williams say:

"The Cost of Service is based upon the above-mentioned estimates of throughput. These throughputs have not, however, been compensated for (1) seasonal variations in refinery demands below capacity, (2) unforeseeable competition in serving the areas considered, and (3) variations in the predicted gradual marketing growth due to temporary fluctuations. Therefore, the derivation of a tariff from the theoretical Cost of Service mentioned, must consider these factors in addition to the actual throughput agreements obtainable".

My question is, it is not proper, is it, to compare the tariff rate of Interprovincial with Cost of Service figures which Dutton-Williams have compared, you are not comparing the same things?

M. BROWN: With your permission I would like to call on Mr. Clark to expand the use of the phrase "Cost of Service" and not giving it with a



specific tariff figure there are certain minimum conditions upon which the Cost of Service can, in fact, become the tariff. If I may call on Mr. Clarke.

MR. CLARKE: Mr. Pattillo, I made some studies in connection with coming to a conclusion as to whether this line is financially feasible and in so doing I have kept in mind what might be a minimum throughput requirement which could amortize the debt in addition to all the other costs incurred over a period of 15 years and in so doing I used as a tariff this Cost of Service that has been mentioned in this submission.

MR. PATTILLO: So that you did treat the Cost of Service as if, in fact, it was a tariff?

MR. CLARKE: Yes, sir.

MR. PATTILLO: Well, my problem, Mr. Clarke, is, to put it very simply, this: At Calgary we were told by Interprovincial that when their line was operating at a maximum capacity, ultimate capacity, that their cost was 2 cents per hundred mile barrel and that is the cost figure that appears here and yet their tariff figures are substantially more. It is my understanding that if you are going to operate a pipeline and Dutton-Williams do refer to it in the reporting letter, that there are so many factors that you must take into consideration in order to protect yourself in your economic feasibility



and that you have got to have this spread between cost and tariff.

MR. CLARKE: I believe I am a little bit far afield, I am not just sure of what the cost included which added up to 2 cents, I do not know whether it included the return on equity or what rate of return on the capital investment and those factors may be the tariff itself and the cost of service itself, I don't know.

MR. PATTILLO: I do not recall exactly what they did tell us - -

MR. CLARKE: I believe there may be a round disagreement. I remember the quotation from the Dutton-Williams' report or else from Mr. Brown's statement that Cost of Service was 3.2 cents, not 2 cents by Interprovincial.

MR. PATTILLO: I know Mr. Brown makes that statement somewhere here.

MR. CLARKE: I do not think I can be helpful from that.

MR. PATTILLO: I think 3.6 cents is the tariff. I see Mr. Waldon, the Treasurer of the company nodding his head and that is what, in fact, it is. Do you not have to have -- let me get at it this way: on your projections here on the Cost of Service and economic feasibility of the line, do you contemplate definitely Interprovincial taking oil at Superior?



MR. CLARKE: Yes, sir.

MR. PATTILLO: Do you contemplate them taking oil at North Bay?

MR. CLARKE: No, sir.

MR. PATTILLO: But if they do not take oil at Superior then all your calculations would have to be adjusted upwards; is that right?

MR. CLARKE: Either that or we would reduce the size of the line and the capital requirements.

MR. PATTILLO: Also, your calculations then are based on the Montreal market increasing to 402,000 barrels per day in 1970?

MR. CLARKE: Not the calculation which I term the break-even basis.

MR. PATTILLO: What do you calculate as a break-even basis?

MR. CLARKE: The build-up as indicated in the first year and the second year both at Superior and at Montreal and then levelling off in the third year to 260,000 barrels per day to Montreal and 75,000 barrels a day to Interprovincial.

MR. PATTILLO: And that point that the tariff of 48.1 cents per barrel, that 22 cents, I think it is into Superior, you will be able to break even?

MR. CLARKE: That, in my opinion, would provide sufficient funds from depreciation, deferred



asset and net income to retire the debt, it did not make it in 15 years, it was 16 years and 2 or 3 months. It would do nothing in the nature of paying dividends to common stockholders.

MR. PATTILLO: Would it do anything in giving you funds for future expansion of earnings?

MR. CLARKE: Yes, that provides for all the expansion indicated in this projection of Dutton-Williams with the exception of, I believe, \$7 million or \$10 million at the time the North Bay hitch-up would have been made I reduced that to \$5 million arbitrarily.

MR. PATTILLO: Well then, that calculation you are taking into consideration that North Bay does come into the picture?

MR. CLARKE: Not on this calculation, I assumed we were going to build along on a work-even basis and not do anymore than 75,000 barrels a day at Superior. We would not do anything at North Bay.

MR. PATTILLO: Now, that is all I want to ask you at the moment, Mr. Clarke. Mr. Brown, since the hearings in Calgary and up to the moment, in your study of this whole problem, do you agree with me that it is not practical to talk about private interest building a pipeline to Montreal until such time as the refiners in Montreal are prepared, either voluntarily or otherwise, to sign throughput agreements?



MR. BROWN: I think throughput agreements are fundamental in building the line.

MR. PATTILLO: And you know from the evidence you heard in Calgary and from inquiries you have made since that none of the refiners in Montreal at the present time are prepared to sign throughput agreements?

MR. BROWN: I would not make that statement, Mr. Pattillo, I do not know whether they are or not.

MR. PATTILLO: Let me put it this way, have any of the refiners in Montreal expressed willingness to sign a throughput agreement?

MR. BROWN: I have not asked them, Mr. Pattillo.

MR. PATTILLO: Now, when you are talking about the economic picture and saying that Alberta oil would be competitive with Venezuelan or Middle East crude laid down in Montreal, you are assuming that neither the Middle East producer nor the Venezuelan producer would be prepared to reduce his price?

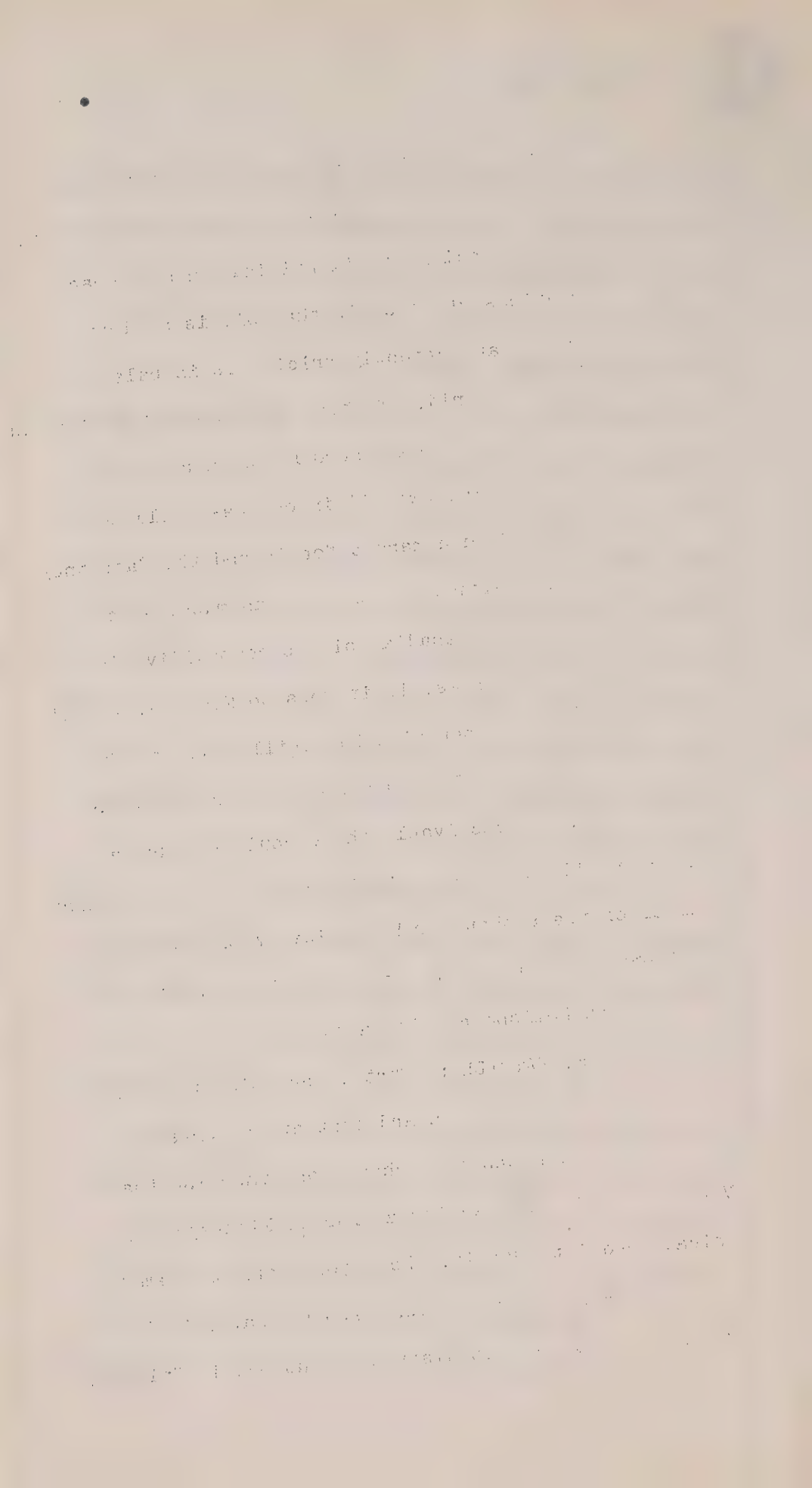
MR. BROWN: I think the statement I made to you in Calgary on that point, Mr. Pattillo, was that the oil that moves into our present Canadian markets is presumed to be competitive with Illinois basin oil at Sarnia. I suggested to you that I thought it was in the best interest of the Canadian



oil industry to continue to make the pricing point, as historically it has happened in the past, Sarnia, and my understanding of oil pricing, and we hear many variations of this, is that oil is a global product and that currently pricing is in balance throughout the world. We hear of interesting distress situations in South America and elsewhere, but, in fact, the people who own oil in one case told me they are unable to find a market for it and the fact they have a little distress does not mean much. From my point of view our Canadian oil is competitive in the markets it now serves, if it goes to Montreal it will continue to be competitive but still based on the Illinois pricing. The reason I make that statement is it could be conceivable there could be such a flood of oil out of the Middle East in the next short number of years that North America or the Western Hemisphere could end up with one pricing policy and the Eastern Hemisphere with another.

MR. PATTILLO: What I was going to suggest to you was that I have heard that at the present time either by means of exchange or otherwise that Venezuelan oil is reaching as far as Minneapolis, Chicago and into Sarnia. Have you heard the same?

MR. BROWN: Oh yes indeed I have, it is one of the things that distresses us out in Calgary.





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MR. PATTILLO: And I think you would agree with me that that can only be accomplished if they are using some other measure than merely posted prices.

MR. BROWN: I think it is accomplished because it is their own oil and cost is a factor on posted prices.

MR. PATTILLO: The posted price is irrelevant ; it is cost that is ---

MR. BROWN: I would think in this particular instance you have in mind that is the case.

MR. PATTILLO: What I am concerned about is that that situation could also pertain in Montreal if the refiners in Montreal wanted to continue to hold that market for the Middle East and Venezuelan crude.

MR. BROWN: That is assuming that their parent companies would sell it to them for nothing, or at a greatly reduced price.

MR. PATTILLO: Or at a price that would still give them a profit?

MR. BROWN: Quite so.

MR. PATTILLO: Are we not therefore driven to this, that, looking at it from the pure economics of each of the refiners in Montreal today, they and their parent companies, there is very little to commend to them an Alberta to Montreal pipe line?

MR. BROWN: If you grouped the Canadian affiliates and the parent company, I think your



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statement is correct; if, however, you talk about the Canadian company, I think your statement is incorrect.

MR. PATTILLO: What you mean by that is you are looking at solely the Canadian company that has substantial production in the West, if they took Canadian crude to Montreal they could make a profit on producing that they are not making today?

MR. BROWN: That is correct, sir.

MR. PATTILLO: Now, let's assume that they will look at it not merely as a sole Canadian company operation but as an operation in which their parents are vitally concerned. Do you agree with me that the only way in which you could control a Montreal market for Canadian crude would be by the imposition of embargoes or quotas -- I think you use 80 per cent here, of that nature?

MR. BROWN: Yes, sir.

MR. PATTILLO: And do you agree that those quotas or embargoes would have to be completely regulated by the Federal Government?

MR. BROWN: Yes, sir, I do believe that.

MR. PATTILLO: You also agree that, once you remove the competition or the threat of competition of foreign crude coming into Canada, the Canadian Government would also have to police the



price to make sure that your Sarnia basic price of which you speak was, in fact, observed?

MR. BROWN: No, sir. I would like to agree with you, but I don't. We are only talking about supplying initially 70 per cent, stepping up over a period of time to a larger percentage. There is still room for competitive oil to come in. As a matter of fact, we have a completely artificial price for our oil in Canada at the moment.

MR. PATTILLO: We have this all over the world.

MR. BROWN: I think so. So I don't think this is a sort of policing job. We don't have any oil coming in from Illinois, but we use that as a basis for setting the Canadian price.

MR. PATTILLO: Isn't that only available as long as you have the threat that the importer could bring in oil?

MR. BROWN: I think you have the threat until you completely eliminate the possibility of importation in the United States. You know they have a so-called voluntary import system in which there is still ten per cent or twelve per cent or fourteen per cent permitted to be brought in from elsewhere in the world.

MR. PATTILLO: But that so-called voluntary method is being pretty well regulated, isn't it?



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MR. BROWN: I have no production in the United States, but my impression would be that it is reasonably regulated, but more by the companies themselves.

MR. PATTILLO: Do you think from the conversations you have heard, either before the hearings in Calgary or since, that the independent producer in Alberta is prepared to pay the price for getting the Montreal market and to have his price and his product regulated and be required by the Government to sell it at regulated prices?

MR. BROWN: I have never made any such suggestion, nor have I ever heard one. There is nothing that would involve the government regulating the price in Montreal or, working backwards, regulating the price of oil in the field.

MR. PATTILLO: I quite agree with that, Mr. Brown, but, on the other hand, it may be that in trying to study your proposal one might find oneself driven to that position to make the thing work.

MR. BROWN: I think, Mr. Pattillo, that there are all kinds of possible problems that are related to this. We have tried to approach it from the point of view that there is a principle involved, and the principle is a very simple one: do we want a Canadian oil industry or not, oil-producing industry? Certainly, on the basis of



the available oil in the world, there is no justification for one. If we are all secure and content in our minds that we will always have access to Middle East oil and Venezuelan oil, there is an abundance of it that will last the world for many years, but we do not share the confidence that such is the case, and therefore we think we are justified in taking steps to protect our domestic industry and build it.

Now, the details of the problem I think can be greatly magnified. I have great confidence that the Federal Government wouldn't exercise or attempt to exercise undue regulations on the industry. This is not a wartime measure, this is something to look realistically at the world picture.

MR. PATTILLO: You agree, however, that if the Government did do this it would have to make certain that the ultimate Canadian consumer was protected?

MR. BROWN: That is one of the details. I think these things are not necessary. You can preserve the Montreal area just the same as you are presumably doing it in the Toronto area. If there is any need for the Government to do that, they should be doing it here in Toronto. I think this is not a valid point. If you take steps that set up quotas, someone has to be responsible for policing it, but I would doubt if there will



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ever be a violation, involving a consumer. The basic thing in our argument we put forth is that we ask no tariffs; we believe we can put oil in competitively, therefore the price of the product should remain approximately as it is, and I would think that if there are violent changes made the Government would be entitled to investigate it. But you don't have to set up machinery to do it.

If one company went to one extreme, the other company would be out to get its business.

MR. PATTILLO: What would you do about these quotas? Would each company have a non-assignable quota?

MR. BROWN: I am not a quota expert, and I would not like to speak on the subject beyond this, that the most reasonable approach to the subject, in my opinion, would be that the Canadian Government would make available to Western Canadian production a percentage of the Montreal market.

Now, we have had our consultants investigate the matter, and, as stated earlier in my presentation, the best opinion we have received is that in the year 1960-1961, Canadian crude could service 70 per cent of the Montreal market and that that percentage could probably increase through the years, but that becomes a matter of the refiners balancing their requirements of crude against the products they are expected to produce.



MR. PATTILLO: If you didn't have a tariff, Mr. Brown, or a quota also on imports for products, couldn't you very easily convert the Portland to Montreal crude oil line into a products line and bring in products at much lower prices than you could possibly refine the Canadian crude at in Montreal?

MR. BROWN: I cannot give an honest opinion on that because I do not have knowledge of refinery costs in the Middle East or Venezuelan, Caribbean area.

MR. PATTILLO: That is all, thank you.



THE CHAIRMAN: Mr. Frawley.

MR. FRAWLEY: I only have one question.

I understand that the 48.1 cents may not be enough to recoup the cost of service in the first two or three years but you would be prepared to accept 48.1 cents from the beginning.

MR. BROWN: Under the minimum condition, sir. As Mr. Clarke stated the minimum conditions required in the third year and thereafter 260,000 barrels a day delivered into Montreal plus 75,000 barrels a day delivered to Interprovincial at Superior. That would cover all the costs related to the project, including redemption of the mortgage and debenture debt, and would cover the interest on such debt. It would not provide any return on equity capital.

MR. FRAWLEY: On that basis the tariff would be from the beginning 48.1 cents.

MR. BROWN: That is correct, provided you remember those are minimum conditions.

MR. FRAWLEY: That is right. I just wanted to make that clear. That is all, thank you.

MR. COMMISSIONER BRITNELL: As I understand it you visualize a situation in which approximately 70 per cent of all the requirements of the Montreal market would be met from Canadian oil.

MR. BROWN: Yes, sir.



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Brown, that may be largely an act of faith on your part. I cannot see why the pricing of oil under these conditions should be any different from the pricing of any other commodity. Once you establish quotas I don't see why you cannot have a situation under which foreign oil was laid down up to 30 per cent at, say, \$2.00 a barrel, why there would be any reason why Canadian oil could not fill the rest of the vacuum. Oil could be priced at \$3.00 a barrel if there was no Government regulation to prevent it.

MR. BROWN: I suggested a Government policing might be necessary.

MR. COMMISSIONER BRITNELL: I should think a Gestapo would be much more likely than mere policing. That is no reflection on the oil industry, I did not intend it in that way, I think they would be utter fools if they did not take advantage of the situation.

MR. BROWN: You are making a basic assumption which I think is incorrect. You are making the assumption there is \$2.00 oil running around the world waiting to come to Canada and fill a gap. Such is not the case.

MR. COMMISSIONER BRITNELL: That was merely a figure. It could be somewhat lower.

MR. BROWN: With the exception of a very little bit of distress oil I think you would find



difficulty in finding much oil in this hemisphere or the eastern hemisphere that would be available to perform the function.

MR. COMMISSIONER BRITNELL: Then do you need a quota, Mr. Brown?

MR. BROWN: In the theory of it probably not. On the other hand there is the responsibility of the Canadian Government to declare its policy with regard to the development of our resources. We don't even need an oil industry.

MR. COMMISSIONER BRITNELL: I can't follow you on that. I think we do.

MR. BROWN: There is enough oil in the world, plenty to supply Canada. I think we have to have a National policy with regard to the development of our resources. The case I have put forward is in order to maintain a healthy development in western Canada we have to sell more oil than we are now selling, a greater percentage of our producibility. The market which is available to us is the largest market on the continent. It is a secure one within the control of our own people and is in the Montreal area.

MR. COMMISSIONER BRITNELL: I have no quarrel with you on any of these larger issues, at least not directly. I was coming back to this matter of price. I do take it you



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would agree it might readily need some policing.

MR. BROWN: In practice I think not but I would agree if that became necessary as a condition to doing it we should watch it. The reason you don't need it is there is only one company going to do it. I can't imagine what company would do it. The thing would correct itself very quickly.

MR. COMMISSIONER HOWLAND: Just as a matter of fact, Mr. Brown, I am surprised my good friend Mr. Frawley did not raise this question with you. Have you built in the deferred Income Tax into your estimations?

MR. FRAWLEY: That was a very unkind remark!

MR. BROWN: These things happened between the time we prepared the report and the time it was presented to the Commission.

THE CHAIRMAN: It is built into the cost of service according to Mr. Clarke.

Mr. Brown, you leave the inference in that statement that this quota, or whatever action needs to be taken by the Government, although you admit you don't think it would have to be policed, but it applies only to the so-called Montreal market. That would have to be national in its scope, would it not?

MR. BROWN: I don't know enough about



constitutional law, sir. I would think we did not try purposely to avoid the question of the Maritimes. We have had some information with regard to the constitutional position. I would think if a Canadian company desired to do one thing with the Maritimes and another thing with the oil refining industry west of Montreal they could work it out.

THE CHAIRMAN: Does Alberta not fear an influx of British Borneo or Indonesian or Venezuelan crude into Vancouver?

MR. BROWN: There are people much more equal to answer the question than I am, sir, but it is a very real danger.

THE CHAIRMAN: What is the deterrent to it?

MR. BROWN: It is common knowledge I think that at a refinery in the Puget Sound area British Borneo crude could be laid down at considerably less cost than Alberta or Canadian crude. If it could be laid down in Puget Sound area it could be laid down in Vancouver.

MR. BROWN: I would think that is right, sir.

THE CHAIRMAN: What is the deterrent?

MR. BROWN: Could I approach it in another way. We are not in the refining business. I think on one occasion we did present to the



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Commission an illustration of California oil moving into the Pacific Northwest or Anacortes at \$3.98 when they could have bought Canadian at \$3.15. Then there is the phrase of my friend Walter Wrigley which my friends in the industry call commercial preference. There is in the oil business many factors that decide these things. I am not competent to answer the question.

THE CHAIRMAN: The fact of the matter is on this reasoning we have been following to-day there is just as much need for a quota to be applied nation-wide as merely for the Montreal market.

MR. BROWN: I would agree with you, sir. In agreeing with it I would not wish to reflect on the people who purchase crude in Vancouver area. I am quite sure they would not import Borneo oil in there.

THE CHAIRMAN: There are certain fundamental reasons for the moment that they would not. The day may come when it would pay them to do so.

MR. BROWN: I have no opinion, sir.



THE CHAIRMAN: I cannot reconcile -- perhaps I have misunderstood it -- your statement, on page 5, with the contents of Dutton-Williams report, page 56. You say on page 5 of your statement:

"The steel requirements of this new pipeline exceeds 700,000 tons. This tonnage should be mainly available in Canada."

On page 56 of the Dutton-Williams report it is stated:

"Canadian mills cannot commit themselves to rolling more than 200 miles per year of 34-inch or 36-inch pipe because of plate width".

MR. BROWN: I think that I can explain that, sir. In talking with the people in the steel industry in Canada, they would not take a firm commitment or make a firm statement prior to obtaining an order. However, we have been informed that up to 34-inch, up to 36-inch actually, with some pipe coming from the United States, that the Welland Tube alone could produce between 100 and 120 miles a month, but they would not commit themselves and they would not permit us to speak about 200 miles. If I have not got the point here --

THE CHAIRMAN: But you say "per month" when the Dutton-Williams report says "per year".

MR. BROWN: What the report says is that Canadian mills cannot commit themselves to rolling



more than 200 miles per year of 34-inch or 36-inch pipe because of the plate width. Now, if given an order, they advise us that they could produce up to between 100 and 120 miles a month, but they would not commit themselves. In other words, in committing themselves they would have to make commitments to purchase pipe from other people.

THE CHAIRMAN: From the United States.

MR. BROWN: For the 36-inch. There is a great deal of mystery to the steel business. Apparently there is a 34-inch plate mill going in at the Soo. They are looking at the possibility of making a 36-inch pipe, but I have had no advice back. I do not intend to be misleading --

THE CHAIRMAN: I know you would not intend to be, Mr. Brown.

MR. BROWN: They just would not commit beyond that 200 miles a year.

THE CHAIRMAN: Thank you very much, Mr. Brown, for this report, which is of course exceedingly valuable to the Commission, and for your statement today. The time and expense which you and your colleagues have gone to in the preparation of the report and submissions given to us at Calgary and again today here are appreciated, and we thank you very much.

MR. BROWN: Thank you very much, sir.



Supplementary Submission By

IMPERIAL OIL LIMITED

APPEARANCES:

Mr. J.R. White	- President
Mr. W.O. Twaits	- Executive Vice-President
Mr. J.A. Cogan	- Vice-President
Mr. W.D.C. MacKenzie	- Director
Mr. T.F. Moore	- Vice-President
Mr. J.W. Hamilton	- Director
Mr. F.G. Cottle	
Mr. R.M. Crockett	

THE CHAIRMAN: Mr. Pattillo.

MR. PATTILLO: Thank you, Mr. Chairman.

The next submission we have is a supplementary one from Imperial Oil Limited, and I am proposing that Mr. White and his colleagues come forward now and get the submission marked. I think there are a few preliminary remarks Mr. White wants to make, and then we could adjourn until tomorrow. Mr. Chairman, I am proposing that this submission be marked T-7-7.

---EXHIBIT NO. T-7-7: Supplementary Submission by Imperial Oil Limited.

THE CHAIRMAN: Mr. White, perhaps you will be good enough to introduce your colleagues to the Commission.

MR. WHITE: On my left is Mr. J.A. Cogan,



Vice-President of the company. On my right is Mr. Twaits, Executive Vice-President, Mr. MacKenzie at the end, who is a Director. Behind me -- we may not have to call them -- are Mr. Crockett, Mr. Moore, Vice-President and Director of the company, and Mr. Hamilton, who is a Director of the company.

Mr. Chairman, this supplementary presentation today should almost be given to you with apologies. A lot of it stems from questions that the staff of the Commission have given us. I hope we have not gone overboard in presenting this to you. There is one element that I would like to mention, and that is that we are puzzled by what an economist would think of all this -- the possibility of betwixt and between government intervention and so on. We consulted Mr. Gilbert Jackson, and he very kindly at rather short notice agreed to give us some help. At the end of our questioning here, if there is time, perhaps an hour or thereabouts, I would like to ask Mr. Jackson to come here and tell us what he thinks about it, if that is agreeable to you, Mr. Chairman.

THE CHAIRMAN: Certainly. The Commission needs help.

MR. WHITE: I will read the opening statement as it appears in this report.

At the Calgary hearings, Imperial submitted a comprehensive brief covering various aspects of the petroleum industry coming within the Commission's terms



of reference. This included an assessment of markets and alternatives for expansion of the outlet for western Canadian crude oil.

The recommendations contained in our original submission with regard to crude oil markets reflected continuing studies, supported by Imperial's experience in developing crude outlet from the time of the Leduc discovery in 1947. The Calgary hearings reflected the interest of a producing area where more than normal surplus crude oil producibility has developed after 10 years of extremely rapid growth in crude oil production. This growth may be measured from a starting point of local insufficiency in 1947 to a distribution system extending 2,500 miles from Vancouver to Toronto. The present surplus of light oil producing capacity is concentrated mainly in one province -- Alberta.

The Commission is now sitting in Canada's largest consuming area. The province of Ontario consumes approximately 40 per cent of the total Canadian demand for petroleum products. Canadian crude oil has been brought into this area at no additional cost to the consumer and without any assistance from federal or provincial governments. We believe it is pertinent, therefore, without repeating the arguments presented in our original submission, to restate the principal recommendations.

(a) The first logical step in expanding Canadian



crude oil markets is to saturate the Ontario market through refineries located there before calling on federal government aid for protection of the entire eastern Canada market.

- (b) The problem of export markets for Canadian oil, like base metals, iron ore and dairy products, should be a matter of overall negotiation with United States within the framework of general trade and security policies. Full investigation of this aspect should be exhausted before assuming long-term financial commitments, coupled with trade restrictions, which seem to be part of the Montreal pipe line proposal.

In reaffirming our views, I wish to state categorically, as we did in Calgary, that these recommendations reflect the group judgment of Imperial's own management. Furthermore, when and if we can conclude that the Montreal market is necessary and obtainable, as in the past we will not hesitate to assume our share of the financial risks. Our shareholders, large and small, are aware of this position.

In order to avoid any misunderstandings, I might also restate some elements of the Imperial position.

- (1) Imperial's assets are entirely within Canada and in the 10 years since Leduc, Imperial has invested some \$300 million in equipment and exploration, which funds were chiefly provided by equity



capital. The company's best year was 1957, when it earned only 10 per cent on capital employed, even though a large proportion of our expenditures have been devoted to prospecting and development of oil production.

- (2) In addition to the direct investment noted above, the two existing pipe line systems, Trans Mountain and Interprovincial, were mainly financed on Imperial's deficiency or throughput guarantees. Imperial currently has outstanding some \$100 million in these guarantees, although it has only 8 per cent and 33 per cent stock ownership respectively in these lines. At the present time, our share of crude oil production is approximately 20 per cent. Thus it is evident that we have not hesitated to sponsor and support projects we believe are sound, regardless of the fact that others would use more of such facilities than we would.
- (3) Imperial's crude oil production is presently more severely prorated than that of the industry in general, even though we have a high proportion of high producibility wells. Currently we are producing at 30 per cent of capacity, and a strikingly painful example, to us at least, is our Golden Spike field. It has an MPR of 45,000 b/d but is producing only 340 b/d, which is its economic allowable.



(4) In spite of the substantial temporary gains that might accrue to our company, we believe that the direction of crude oil into certain markets by some form of permanent artificial restriction is not yet warranted for the good of the industry or the consuming public.

We are reappearing before you now to provide additional information requested by the Commission. It seems clear from your questions and the transcript that some of the basic mechanics of the industry have received insufficient attention or have not been placed in proper perspective to the marketing problem. For instance, the producing industry in western Canada has a unique problem, compared to other industries, in its inability to control the development of producing capacity in response to demand variations. We believe this is a matter that should be given close consideration by the Commission.

With your permission, we propose to try to cover the questions and informative aspects in a series of individual presentations including:

1. The crude oil producing system, capacity factors and economics
2. Further aspects of Canadian crude oil markets
3. Pipe line transportation to eastern Canada

We also have prepared further data on oil pipe line regulation, etc., in response to the



Commission's questions, which can be filed or presented at your discretion.

In considering this material and prior presentations, it would seem that under the Commission's general terms of reference as they relate to the petroleum industry, certain issues have crystallized with respect to crude oil outlet which could be summarized as follows:

- (a) Why should a small group of Montreal refiners guarantee a multi-million dollar pipe line investment under the protection of embargoes, quotas, etc., which are always subject to political change?
- (b) Should the federal government provide the financial guarantees necessary to build such a pipe line?
- (c) Is there an actual benefit to the economy from this proposal, and would it benefit or penalize the consumer and the producer?
- (d) Is there any assurance that under the present producing system in western Canada the situation now being used as a reason for emergency action will not repeat itself in a few years' time?

These, we believe, are the pertinent questions posed by proposals made before this Commission. In the light of our prior submission and the information which will follow, Imperial's position can be summarized as follows:



- (1) The Montreal market is not a permanent solution to the over-supply problem in western Canada and the general worldwide over-supply position. The current situation could well be repeated in a few years' time.
- (2) Some modification of the prorationing and Crown Reserve disposal system would seem to be required in western Canada to allow better supply and demand balancing. Under the present system, the guarantors of a new pipe line would simply be providing a new outlet for new producers and stimulating a further build-up of capacity, which could well result in a repetition of this situation within a few years.
- (3) Imperial cannot at this time justify assuming further heavy financial obligations for a new pipe line, which we are not convinced is economic, on top of those we already have in connection with Interprovincial and Trans Mountain.
- (4) Consumer interests in eastern Canada can best be protected by freedom of competition. By corollary, embargoes or quotas affecting such a large percentage of the demand are administratively complex, and could well lead to some form of price control, which has proven undesirable for all concerned in the past.



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- (5) Producer interest in western Canada is not simply one of excess producing capacity distributed amongst all companies and all areas; it is also a matter of future discoveries and new producers. It should be noted that:
- (a) Exploration drilling and land holdings in western Canada have not diminished;
 - (b) 95% of the shut-in producing capacity is owned by 28 companies, out of some 220 operators;
 - (c) The so-called integrated companies who have a large share of shut-in production **are also** the ones carrying the main burden of primary exploration which opens up new oil areas;
 - (d) The question of foreign ownership is not limited solely to integrated companies.
- (6) The national economy will derive the maximum benefit from economic, rather than forced-draft development of oil resources. Regardless of present difficulties, economic markets for Canadian crude oil can be expected to grow and drastic measures should **not** be adopted until it seems certain that this is the only way of preserving the health of the industry.
- (7) Of the greatest importance is the loss of industry freedom which would result from the



strictures and controls implicit in the Montreal pipe line proposal. In an era when many are appealing to government for protection or subsidy, I believe it is possible for the oil industry to provide the constructive example of being able to handle its own problems - - complex and difficult as they may be.

THE CHAIRMAN: Thank you very much, Mr. White.

I don't think we should proceed any further this afternoon with your submission, if that is agreeable to you.

MR. WHITE: Yes, Mr. Chairman.

THE CHAIRMAN: We could leave the rest of it for tomorrow.

I would like to say at this point, you know, that the Commission is not here, and was not appointed, to investigate the oil industry, and in any of the matters before it we have tried to push to one side those things which have been brought before it by the industry itself which might scent of investigation of the industry itself as distinct from the matters under specific reference to the Commission. So I hope that none of the oil companies feel that this is an investigation of the industry.

MR. WHITE: On the contrary, Mr.



Chairman, it is an opportunity to air our troubles and views, and we thank you for the opportunity.

THE CHAIRMAN: Gentlemen, we will adjourn until ten o'clock tomorrow morning in this room.

--- Thereupon the proceedings were adjourned at 4.35 p.m., to be resumed at 10.00 a.m., Tuesday, July 8th, 1958.

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Mr. Bolden

ROYAL COMMISSION

ON

ENERGY

HEARINGS

HELD AT

TORONTO

ONT.

VOLUME No.:

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TORONTO, ONTARIO

ROYAL COMMISSION

ON

ENERGY

Hearings held at Toronto,
commencing Wednesday,
July 2, 1958, at 10.00 a.m.

PRESENT:

Mr. H. Borden, C.M.G., Q.C.	Chairman
Mr. J. L. Levesque	Member
Mr. G. E. Britnell	Member
Dr. R. D. Howland	Member
Mr. L. J. Ladner, Q.C.	Member
Dr. R. M. Hardy	Member

COMMISSION COUNSEL:

Mr. A. S. Pattillo, Q.C.

Mr. Miles H. Patterson

Mr. J. F. Parkinson	Secretary to the Commission
Major N. Lafrance	Assistant Secretary to the Commission



Tuesday,
July 8, 1958.

---On resuming at 10.00 a.m.

THE CHAIRMAN: The Commission will now resume its hearing, gentlemen. Mr. Pattillo?

MR. PATTILLO: Thank you, Mr. Chairman. Mr. Chairman, Mr. White read yesterday the opening statement, and I have gone over the whole submission. I think that there are some parts of it that could be taken as read, but, on the other hand, there has been undoubtedly a great deal of work put into this submission, and I think you will have to leave it to Mr. White and the others as to what they feel they can delete, having regard to the fact that they appreciate we are running on a pretty tight schedule.

THE CHAIRMAN: Well, I would like to make it clear that whatever is not read, Mr. White, will, in any event, go into the record, taken as read.

MR. WHITE: Thank you, Mr. Chairman.

THE CHAIRMAN: But the decision lies with you as to which parts you wish to take as read and which parts you would like to read.

MR. WHITE: We shall do the best we can. I hope there will be no confusion and lack of cohesiveness in our presentation. However, we will try to do what we can to minimize the suffering here.

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In addition to the gentlemen I mentioned yesterday, Mr. Jackson has joined the group behind me on my extreme left. Perhaps a change of voice would be a good thing, and Mr. Twaits will pick up at this point with Section II.

MR. TWAITS: This is Section II, page 1, entitled "Crude Oil Producing System, Capacity and Economic Aspects".

Summary: Throughout the Calgary hearings, frequent reference has been made to allowables, the effect of prorationing, producing potential versus actual production and rate of development. All of these have been discussed as separate items without placing them in proper perspective to the whole producing operation. The Commission has subsequently asked for further clarification on these points, from all of which it would seem that the mechanics of the producing industry are not fully understood. It is Imperial's opinion that these mechanics are of vital importance to the problems under consideration before the Commission, particularly in respect to markets.

Accordingly, we have found it necessary to prepare a somewhat detailed description of the present producing system and its evolution based on three principal factors: (a) the land tenure system, (b) good conservation practice, and (c) provincial government land policy. These are contained in Monographs 1 and 2

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attached. Monograph 3 gives some further information on producing economics in response to the Commission's questions.

We believe these monographs will answer many of the questions raised by the Commission. The significant points developed therein might be summarized under the following division:

I. Prorationing:

- (a) Under our land tenure system with multiple mineral ownership in a pool, prorationing has evolved as the most practical mechanism to protect conservation and correlative right when supply exceeds demand. It is not a perfect mechanism and some of its side effects give rise to other problems.
- (b) Prorationing limits the flexibility of individual producers to find outlet for crude oil because the individual, that is the individual producer, cannot meet price competition in terms of his own economics. Since all producers participate in outlet, the economics are limited by the marginal producer. By corollary, prorationing has the effect of protecting, and even encouraging the marginal producer.
- (c) The competitive limitation imposed by prorationing could be alleviated by resorting to a system under which pools with high producing capacity are permitted selectively to take on extra



markets at some form of competitive discount, if necessary. This, of course, could have serious political aspects, but cannot be excluded entirely from consideration.

II. Development Pace:

- (a) Multiple mineral ownership and the resulting rateable take system, together with Crown land policy, forces the pace of oil development with little flexibility to meet demand variations. In order to offset drainage, the producer must drill development wells and add to producing capacity regardless of demand; on the other hand, the concession type operator in foreign areas drills wells as required by demand.
- (b) The discoverer of an oil pool on Crown land can lease only up to 50 per cent, the remainder being disposed of to purchasers by sealed bid. This policy, coupled with prorationing, means that any purchaser, even one previously unconnected with the industry, can buy oil production and automatically participate in market outlet provided by the investments already made by others.
- (c) The principle of the economic allowable guarantees a floor production rate or minimum volume to any producer. The guaranteed floor production may form the basis for financing the purchase of proven reserves, thereby introducing an element of rigidity in producing economics. At the same



time, since the economic allowable bears no relation to ability to produce, wells with high producing potential must bear the brunt of proration when demand falls short of supply.

- (d) Today the economic allowable per well would seem to be high since it accounts for almost all of the market demand and ability to produce has lost significance. For example, as mentioned yesterday, Imperial's Golden Spike field with a pool M.E.R. of 45,000 b/d is currently at an economic allowable of 340 b/d.
- (e) The unequal distribution of shut-in capacity and the effects of the high economic allowable were referred to in our previous submission in which we indicated that 95 per cent of shut-in capacity was owned by 23 of some 220 oil companies operating in western Canada.

III. Ratio of Production to Producibility:

- (a) Because the factors forcing rate of development of proved reserves are so different for various oil-producing countries, the ratio of production to developed producing potential is not a satisfactory yardstick to measure the comparative status of producing rates. A more significant comparison is the ratio of remaining reserves to production rate, and in this comparison the withdrawal rate in Canada is second only to the U.S. among major producing countries.



This is illustrated by the following table:

RELATIONSHIP OF REMAINING RESERVES TO ANNUAL PRODUCTION
VARIOUS COUNTRIES

<u>Country</u>	<u>Annual Production (MM Bbls.)</u>	<u>Remaining* Reserves</u>	<u>Ratio</u>
Canada (1)	181.7	2,750	15.1 : 1
U.S.A. (2)	2,551.8	30,434.6	11.9 : 1
Venezuela (2)	1,040.6	15,890	15.3 : 1
Middle East (3)	1,286.6	154,416	120.0 : 1

(1) Imperial Oil Limited submission to Borden Commission

(2) World Oil, Feb. 15, 1958

(3) World Petroleum, Jan. 1958

* Assumed to be remaining in all cases

(b) The western Canadian system tends to result in maximum development of producing potential in relation to reserves at all times. Under these circumstances, it appears that a high ratio of producibility to production is characteristic of the system and can be expected to repeat at any level of production. That might be expressed another way -- at a low ratio of production to producibility.

IV. Economics:

(a) Imperial's original submission estimated that the producing industry "on average" was earning a return of 7 - 12 per cent. Considering price reductions, it is still Imperial's view that on average the industry cannot expose itself to



higher transportation costs and more remote markets which might result in a permanently lower price structure at wellhead.

- (b) Averages do not tell the story because they reflect a combination of marginal and flush production . Taking specific examples, the purchaser of oil in the ground will consider the price per barrel and the economic allowable under the prorated market to reach a specific decision. However, the explorer, carrying on large-scale exploration, and who is chiefly responsible for opening up new oil areas, must take a longer-term view. In the case of the latter, the cost of oil finding cannot be known for a number of years.
- (c) While the industry in western Canada is still operating at a cash deficit, the gap can be expected to close within the next few years, even without new markets for oil. Under these circumstances, it would seem that exploration activity may be maintained at approximately present levels.



MR. MacKENZIE: Business Systems under which oil is produced: Throughout the Calgary hearings, Commission counsel implied that a problem existed where there was crude oil prorationing (as in the Province of Alberta and in the State of Texas) and the prorated crude was in competition with various world-wide crude sources. Also, on several occasions, references were made to other producing areas of the world (exclusive of the North American continent) where production is not prorated and is not produced rateably. From this cross-examination it developed that there are two basic business systems in the world-wide producing industry, the concession system in foreign areas and the North American system of rateable take.

Several industry witnesses agreed that the North American system did have an inherent disadvantage in the marketing of crude oil, particularly in periods of substantial over-supply. The point was made that specific sales arrangements with refineries were burdened by the necessity of including crude oil which had to be purchased from various other producers by the producer making the sale. Thus the incentive to find additional markets was greatly diminished. One might conclude that if the North American system has such a fault, remedial measures should



be sought. However, before such a conclusion is hurriedly reached, the evolution of both systems must be carefully examined in the light of other factors fundamental to the oil-producing business.

In any examination of the oil-producing business system, three factors govern the actions of crude producers worldwide - - these are

- 1) Petroleum is a fugacious of migratory mineral.
- 2) The operator has only a lease on the minerals and very seldom owns them outright.
- 3) The various governments having jurisdiction insist on conservation and prevention of waste of a vital energy resource.

Dealing with these in more detail:

1. Fugacious Minerals:

Because petroleum is a fugacious mineral, two facts stand out:

- (a) Generally, crude petroleum is volatile and evaporates when brought to the surface, so that, in a broad sense, it may be said that it cannot be physically or economically stored in tanks on the surface for any protracted period. The only efficient storage is underground at reservoir pressure.



(b) When a well is produced from a petroleum reservoir, certain important natural phenomena take place.

i) The pressure is lowered in the vicinity of the well bore which results in a flow of oil to the well from the surrounding area of higher pressure, hence the term "fugacious".

ii) As oil is produced from the reservoir, it is displaced by water inflow or expanding gas or both. The expansion of these fluids provides the reservoir energy necessary to move the oil to the well bore. The efficiency of recovery is therefore a function of the flushing efficiency of the displacing fluids. To achieve maximum recovery, the displacement must be engineered - - it cannot be left to chance and it is accomplished, in practice, by controlling the production rate of each well forming part of the total reservoir outlet. In fact, the science of petroleum engineering is founded on an understanding of the function of displacement of oil from its reservoir and the desire to achieve maximum recovery therefrom.



2. Lessee/Lessor Obligations:

The oil and gas lease has many provisions that are peculiar to the industry, but essentially it is a basic instrument in which the owner leases his property to the tenant for a consideration for a specified period of time and the tenant agrees to look after the owner's property. In the North American system, where often there are many leases in an oil pool, the "drill, pay or quit" provision may force drilling even in times of over-supply, whereas in the concession system where one lease may cover an entire oil field, drilling in times of over-supply is not usually required. Hence, while the fundamental relationship of the tenant to the owner is the same in each system, the obligations of the tenant are importantly different.

3. Conservation:

Oil and gas are sources of energy, and it is an accepted principle that energy should not be wasted if it can be reasonably and economically conserved. In most producing areas of the world, oil production rates are controlled either by regulation or by voluntary good engineering practice in order to obtain maximum recovery from the reservoirs. In addition, the value of assisting recovery by pressure maintenance projects involving injection of gas or of water into the reservoir is



widely recognized, and such operations are now relatively commonplace worldwide.

Pressure maintenance measures must be applied to the entire reservoir. They cannot be confined within lease boundaries and since oil migrates underground due to pressure differences, questions of equity arise in these operations. The magnitude of the equity problem depends largely on the type of reservoir and the number of mineral titles and working interest owners involved. Thus, while the engineering considerations in achieving maximum recovery can be solved analytically, the problems of organization of owners in the North American system are immense. On the other hand in the concession system the number of owners is limited and the problems of organizing pressure maintenance are usually minor.

In any quick assessment of the Western Canada industry, one is inclined to view the provincial government as being the dominant owner of mineral rights, which, of course, is true. However, there are a large number of freehold owners holding about 25% of acreage as illustrated in the table below:

	<u>Crown</u>	<u>Freehold</u>
	(Acres)	
Alberta	139,330,506	16,000,000
Saskatchewan	80,193,922	22,468,478
Manitoba	<u>27,132,208</u>	<u>19,691,472</u>
	246,656,636	58,159,950



It will be noted that in all Western Canada there is approximately 246,000 Crown acres and 58 million freehold acres. Since the average size of a freehold lease in Western Canada is about 280 acres, there are therefore in excess of 200,000 freehold tracts. Since these are interspersed across the southern half of the sedimentary basin, the diversity of mineral title ownership becomes evident. In addition, it is the policy of the Crown to lease in larger but still relatively small tracts, causing a similar diversity in Crown lease ownership.

Thus, to make the North American system parallel the concession system, the basic land tenure system would have to be changed so that, in some form or to some degree, the rights of many individual mineral owners would have to be abrogated. As well, the Provincial government's leasing policy would have to be changed to one of granting larger lease blocks. Essentially, the concession system is one designed for business on a large scale whereas the North America system evolved from free enterprise on any scale.

The Problem Restated: Historically most oil fields in North American have been comprised of many working interest owners and many mineral title owners. Each working interest owner was obligated to look after his lessor's interests.



A number of years ago each operator produced his wells according to his ability to find markets for his own oil; unequal reservoir withdrawals resulted, causing pressure variations which resulted in subsurface drainage toward those wells producing the largest quantities. This disturbed equities. Also, the unequal withdrawal rate caused an uneven advancement of the displacing fluids, trapping oil behind the displacement front which resulted in underground waste and lower recoveries. Industry and government had to solve a serious problem of conservation.

A Solution: In most regions, regulatory bodies were set up to ensure conservation of this vital energy resource. As matters stand today, the limit of the industry's and government's ingenuity in solving this extremely difficult problem has been to modify the law of capture by regulation, or expressed in another way, to adopt the principle of rateable take within a pool. Essentially, rateable take means uniformly restricting the production rate of the individual wells in a pool to a level not higher than that which will ensure maximum recovery from the reservoir. This rate is based on the physical characteristics of each reservoir.

Where an area has developed producibility in excess of market demand, where there are a number of pools, where there are several purchasers



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of crude oil and where there are many operators and many mineral owners, proration often becomes necessary to enforce rateable taking. Thus, proration stems from rateable take. It is only when the market demand for crude oil falls below the aggregate maximum efficient producing rate that it becomes necessary to prorate production to market demand.

The North American system of "rateable take" has been evolving over a period of many years and any assessment of the system should consider the results to date in light of the fundamental factors which govern oil production.

1) The system, by assuring each operator in a pool a market for his production often results in development far in advance of market needs. Excess producibility is normal under this system. Actually, the drilling obligations attendant on the North American leasing system are largely responsible for excess drilling. Prorating facilitates an operator making the decision to drill because he knows that some of his wells' production will find an immediate market.

2) The system does not put equal pressure on all producers to develop new markets for crude. Many ride on the backs of the few who develop outlets for crude. In the concession system, each producer must find markets for his own crude.



12 3) The system tends to protect the marginal producing property at the expense of the more prolific wells. Under certain circumstances, the system not only protects but it encourages the development of near marginal properties. The end result is a substantial volume of "protected" high-cost production being produced and prolific low-cost properties are produced at severely restricted rates. During periods of intense competition and surplus supply, such circumstances severely handicap the competitive position of the industry.

4) The system allows the adoption of sound conservation measures even under a most complex land tenure system.

5) The system has developed an energy source which is a tremendous asset to the nation as a whole at a pace which could not otherwise have been achieved. (This is a corollary to 1 and 3).

6) The system prevents the premature abandonment of wells which are only partially depleted. (This is also a corollary of 3).

7) The system fosters a diverse industry and makes practical the development of privately owned fugacious minerals.

The table of drilling footages shown below demonstrates the result of pressures for development drilling under the North American system and indicates the wide disparity of footage drilled between North American and other oil-producing



countries or areas.

Total Footage Drilled by Years

Selected Free World Producing Areas (source-World Oil)

(Figures represent thousands of feet)

<u>Year</u>	<u>Canada</u>	<u>U.S.A.</u>	<u>Venezuela</u>	<u>Total South America</u>	<u>Total Middle East</u>
1947	1,471	113,279	4,161	6,154	233
1948	2,226	135,099	4,349	5,732	383
1949	3,741	139,063	3,799	5,404	479
1950	4,629	159,972	2,229	3,713	476
1951	5,816	174,282	5,433	7,019	494
1952	8,778	184,132	7,228	8,784	315
1953	9,801	198,432	6,019	10,054	631
1954	9,356	209,450	6,026	9,971	438
1955	12,569	228,530	6,542	11,608	543
1956	15,736	235,836	9,595	15,040	978

THE CHAIRMAN: Can you tell me what the significance of that table just referred to is?

Is it not a fact that you get oil at a much shallower depth in the Middle East than in various other countries? Does that total of footage ---

MR. MacKENZIE: That really has no significance. Many Middle East wells are of the order of 5,000, 6,000 or 7,000 feet. In Maracaibo, in Venezuela, the depths will also be in the 7,000 and 8,000 feet range, as they are in Western Canada.



THE CHAIRMAN: What about the flow?

MR. MacKENZIE: So that the total drilling footage, which is all that that table tabulates, merely indicates that a tremendous number of wells, that an awful lot of drilling, in other words, was done in Canada in comparison with all of South America and the Middle East. Of course, the producing capacity, you will remember, is very much less in Canada in comparison with the Middle East and Venezuela. So clearly very much fewer wells produce more oil in those areas of the Middle East and Venezuela in comparison with Canada and the United States.

THE CHAIRMAN: So in looking at that table won't you have to take that factor into account?

MR. WHITE: There are other factors, such as you have mentioned. Without making this an absolute demonstration, except that there is a lot of drilling in the North American Continent, it is significant that the footage in Canada and the footage in South America are about identical.

MR. COMMISSIONER LADNER: Would not the relationship of the footage and the number of wells producing be information that would be indicative, that would have meaning?

THE CHAIRMAN: You mean the number of dry wells?



MR. WHITE: There are two factors here. The purpose of the table is merely to show that many more wells must be drilled in the North American system. As Mr. Borden has correctly mentioned, you get ten times the production from one number of wells than from one-tenth the number of wells. To that extent the table is a little misleading, but, bearing that in mind, it is a demonstration that there is a great deal more drilling being done in North America under this system and under the geological conditions obtaining here. I do not think it is meant to prove anything except to indicate the trend and illustrate the drilling pressure that you have in this country.

MR. TWAITS: Monograph II. Part I - Development Pace.

Evidence given in the Calgary hearing showed that the western Canadian producing industry has developed production far in excess of immediate market requirements. The point has been made that this over-development is an inherent characteristic of the North American system. However, some of the specific factors might be examined to see if any retrospective view would be of assistance in future policy. In our view, four items merit discussion.

(a) Basic Oil and Gas Lease: The leases in use by the provincial governments, the



mineral-owning companies, the operating companies, and the individual owners of mineral rights, all have an offset drilling clause, which provides that if production is obtained from the adjoining property, a well shall be drilled within a specified period, usually 60 to 180 days, varying with the lease. This, of course, is designed to protect the property from drainage. In the provincial government leases (and a few freehold leases) it is also common to have a continuous drilling clause in addition to the offset clause.

The theory behind the continuous drilling clause is that Crown leases are sometimes granted which are four to tenfold greater in areal extent than most freehold tracts. The offset clause would require operators to drill along the periphery of the large lease, but would not force development in the centre. Thus, the continuous drilling clause really becomes a density drilling requirement, so that the Crown is ensured that its properties are drilled in the same proportion as the neighbouring tracts.

The continuous drilling, or density drilling clauses have been enforced but not always rigidly. On the other hand, all mineral owners have insisted on discharge of the offset drilling obligation (or, alternatively, compensation or surrender of the lease). There are tens of



thousands of such instruments in force today in western Canada; there is no practical possibility of changing this latter factor, which so materially forces rapid development.

(b) Allocation of Production: Production allocation in the province of Alberta can be divided into two parts:

(1) Minimum well allowances which can be considered as the granting of a floor allowable -- it is called an "economic allowance". The administration of this allocation has changed and is in the process of change. The production so allocated (plus a limited amount of older production such as from Turner Valley) is granted before any prorated allowance.

(2) Prorated allowances which can be considered as an increment of production granted on the ability to produce. The administration of this phase is also undergoing some change.

Considering first the prorated allowances, we have a further subdivision of the influencing factors -- there are four points:

(i) "Drill or be backed out by competitors."

Because the total market is prorated among the wells of the province, any new well



successfully completed will reduce the share of the market assigned to all existing wells. Thus, an operator who has a limited amount of production, but who has proven and undeveloped properties, has a real incentive to drill and develop and improve his market share. On the other side of the coin, we have the strange anomaly of the operator who has a substantial number of productive wells continuing to develop in order to minimize his market share losses. Hence, the expression "develop or be backed out."

- (11) "Development factor." Under the present Alberta procedure, some of the oil to be prorated is influenced by an arbitrary development factor which is incorporated into the MPR formula. The theory behind the development factor has been that during the early stages of development of a reservoir, the existing wells can produce greater amounts of oil without exceeding the maximum efficient rate of the reservoir than in the late stages when a reservoir is more fully developed and more wells are sharing in the production. Until April 30, 1958, the maximum development factor was 2.5; in other words an average Pembina well in



November 1955 received a basic MPR of 76 barrels per day which, when multiplied by 2.5, gave a final MPR of 190 barrels per day which, which continued until 40 per cent of the estimated ultimate number of development wells are drilled. As development proceeds, this factor is gradually reduced to unity. In reality, this was a straight discovery bonus and resulted in tremendous pressure on an operator holding undeveloped properties in the early stages of any pool's life to drill rapidly, in order to capitalize on the temporarily enlarged MPR.

(iii) "Development factor elimination." The Alberta authorities concluded in January, 1957, as follows: "If the bonus concept is removed from considerations of the development factor, then it appears to the Board that the preponderance of well supported opinion expressed at the hearings favours elimination of the development factor over a transition period." The elimination schedule is as follows:



<u>Period</u>	<u>Maximum Development Factor</u>
to April 30, 1958	2.5
May 1, 1958 to April 30, 1959	1.75
May 1, 1959 and thereafter	Eliminated

While the development factor has virtually no impact on development pace today, and will be eliminated in the future, its influence two to three years ago (particularly in the early stages of large Pembina programs) was very considerable.

(iv) "Total ability vs. residual ability."

The Alberta Conservation Board's present administrative procedure provides that the market demand is determined each month from refiners' nominations, the sum of all economic allowance oil and non-proratable oil is next determined and subtracted from the nominations leaving a residual amount to be prorated among the proratable wells. The ratio this proratable amount bears to the total potential of the proratable wells is the so-called proration factor which is applied to the MPR of each proratable well. Under the present system this is handled as follows, assuming a proration factor of 0.2:



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	<u>Well A</u>	<u>Well B</u>
MPR	100	50
Economic Allowance	40	40
Proration Factor	0.2	0.2
Proratable Allocation	<u>20</u>	<u>10</u>
Allowable	60	50



It can be seen that prorating the total MPR (including the economic allowance portion) results in Well B being allowed to produce 100 per cent of its MPR whereas Well A is only allowed to produce 60 per cent of its MPR. The present system, therefore, weights in favour of the poorer wells -- hence, the important factor in this system is the number of wells operated as opposed to ability to produce.

Commencing in 1960, the system will be changed to prorate only on the residual portion of the MPR (excluding the economic allowable) as follows: In this method the residual amount to be prorated will be determined according to the residual potential of the proratable wells which results in a higher proration factor, say 0.4.

	<u>Well A</u>	<u>Well B</u>
MPR	100	50
Economic Allowance	<u>40</u>	<u>40</u>
Residual MPR	60	10
Proration Factor	<u>0.4</u>	<u>0.4</u>
Residual Amount	<u>24</u>	<u>4</u>
Allowable	64	44

This new system will therefore tend to give greater recognition to the ability to produce and reserves than does the present system. While under today's conditions the total prorated allowances are very small volumes, and therefore this basic change would have only slight influence, it may be of considerable importance in the future.



Having discussed the prorated allowances, it is now in order to consider the minimum well allowances. Here too, there are subdivisions of this aspect. However, there is an important inter-relationship between the prorated allowances and the minimum allowances which is best illustrated by Figure I which shows light crude production in western Canada divided as follows:

- production from Saskatchewan, Manitoba, B.C. and the Northwest Territories
- prorated production from Alberta
- production from minimum well allowances (i.e., economic allowances and non-prorated older production, e.g., Turner Valley) in Alberta.

The striking trend is the rapid growth of the minimum well allowance volume from a total of about 150,000 b/d at the beginning of 1955 to about 265,000 b/d at the end of 1957. This extremely rapid growth had a preferential position and the prorated oil was greatly reduced, as can be seen from the Chart.

Actually, when prorating becomes necessary to ensure rateable take, the simplest and most logical method would be to apply a percentage to the MPR's of the various wells in the same ratio that market demand bears to potential. Such a method would weigh in favour of the ability to produce and the extent of reserves which does not seem unreasonable.



However, the desire on the part of conservation authorities to prevent premature abandonment of marginal producers and the desire by a segment of industry to have an artificial floor allowable for each well, has led authorities to establish an economic allowance based on depth. This brings us to the point of discussing the subdivisions of the influencing factors that stem from administration of the concept of a "floor" or a "minimum" or an "economic allowance:"

(i) & (ii) The Alberta Conservation Board has defined the economic allowance as an increment of production for each well which "should afford a prudent operator the opportunity to meet his operating costs and to recover both his drilling and completion costs in a reasonable period of time."

Thus the economic allowance is by definition an incentive to drill development oil wells. Further, an economic allowance of this implied magnitude facilitates borrowing for development drilling, and the resultant financing places further emphasis on early development of productive properties.

The Alberta system is actually comprised of an "initial economic allowance" designed to accomplish their defined objective and granted for seven full years after discovery.



After expiry of the initial period and not before 1962, an operating allowance is granted.

The initial scale is related to depth as follows:

<u>Depth</u>	(i) <u>Pre 57 Scale</u>	(ii) <u>Post 57 Scale</u>
	Excerpts only B/D	
3500	38	30
4000	39	32
5050	41	38
6050	44	45
7050	47	52
8100	50	62
9050	53	72
10000		84

While today the Post 57 scale (ii) is in use, the earlier Pre 57 scale (i) had important implications in the past. In September 1957 the Alberta Conservation Board announced the Post 57 scale to be effective January 1, 1958. This new scale reduced allowances for the shallow wells and increased the allowances for the deeper wells. Because of the preponderance of relatively shallow production, this change had an immediate effect on the total volume of oil granted for minimum well allowances. This appears as a levelling off in 1958 of the bottom segment in Figure I.

(iii) Operating Economic Allowance -- In 1962, in those pools declared fields by the Alberta Conservation Board before 1955, the initial



economic allowance will revert to an operating economic allowance and each year thereafter certain fields will drop to the operating scale. This will have the effect of reducing the total amount of economic allowance oil in 1962 by about 20 per cent. Excerpts from the published operating scale are shown below:

<u>Depth Interval</u>	<u>Bbls/Day</u>
4,300	25
5,400	28
6,400	31
7,300	34
8,100	37
10,100	45
12,150	55
15,000	73

Thus looking to the future, we can see a "plateau" in 1958 for the total volume of oil allocated to minimum allowances, a resumption of the upward trend, 1959 through 1961 and a decline in 1962.

Viewing all matters pertaining to allocated production, it would appear that:

- (1) Floor, or minimum well allowances have been relatively high. Despite recent modifying procedural changes these preferential floor allocations will continue to be of sufficient magnitude to constitute an incentive to drill in themselves.
- (2) Ability to produce and/or unit volumes of reserve receive limited recognition in the total allocation because of the magnitude of the floor or minimum allocations.



- (3) As a consequence of (1) and (2), number of wells has become the important factor in an operator's income -- more so than ability to produce or reserves. The industry then has about as much incentive to drill low reserve wells as a high reserve well.
- (4) Between 1960 and 1962 procedural changes will result in allocations that give somewhat more weight to ability to produce and this may result in some reduction of the existing incentive that industry has to develop properties that are only slightly better than marginally economic.
- (c) Crown Reserves: Production from Alberta Crown Reserves that have been sold as proven or semi-proven properties is now a substantial factor in the total producibility of the province and western Canada. The situation as of December 31, 1957 is estimated below:

<u>From all Crown Reserve Parcels</u>	<u>Bbls/Day</u>	<u>% of Total Alberta</u>
Economic Allowance	56,189	20.3
Total Production	58,039	20.1
Potential (Estimated)	128,447	16.2
Shut-in Capacity (Estimated)	70,408	13.9

The frequency of Crown Sales is a policy matter that lies almost entirely with the provincial governments.

- (d) Well Spacing: In the provinces of Alberta and Saskatchewan, regulations provide that crude oil wells should be spaced one to 40 acres with the



provision that changes in spacing requirements can be made after application to the relevant conservation authorities. After July 1, 1957 the province of Alberta provided that the initial spacing pattern should be one to 80 acres, west of the 5th Meridian. In the last two or three years, many applications have been heard by both the Alberta Board and the Saskatchewan Board for 80-acre spacing and 160-acre spacing. (In a few instances, 320-acre spacing). Generally, both Boards have concurred with the wider spacing applications. This trend to wider spacing has been a progressive step; without it, the serious over-supply situation that exists today would be even worse.

CONCLUSIONS ON FACTORS INFLUENCING PACE.

To assist in a review of the preceding discussion, Figure II has been drawn to show the relationship of the various factors and their subdivisions into specific items. The conclusions can be stated in the order that they are listed on Figure II.

- (1) The frequency of Crown sales and the enforcement of density drilling obligations unquestionably have influenced the pace of development drilling and will continue to be important factors in the future.
- (2) The offset drilling obligations and the "drill or be backed out" situation is an inherent characteristic of the system. It could only be changed



or modified by a basic change in the land tenure system. Such a change, if not impossible, is certainly most difficult of achievement.

- (3) Provincial Conservation Board administrations have adopted a concept of wide spacing which has been a most important and progressive development. It is conceivable that had they chosen otherwise, today's difficult situation would be worse, if not chaotic.

The allocation of production has been based on the principle of granting preferential minimum or floor allocations of oil to every well in the province of Alberta. Viewed in retrospect this floor has been high and has been an important influence in stimulating development drilling on properties that have rather low units of reserves. The unfortunate direction of this peculiar incentive has been given some recognition in recent procedural changes. It can be contended that more drastic measures should be adopted -- in most other industries in times of oversupply simple laws of economics prevail, so that the incentives to develop relatively high cost properties disappear.

PART II - RATIO OF PRODUCTION TO PRODUCTIBILITY. The Commission counsel, in Calgary, asked several witnesses for information on the ratio of production to potential in other producing areas of



the world, possibly for purposes of comparison. We, therefore, feel it pertinent to make a few comments on the use of this ratio as a yardstick of the industry's economic health.

The ratio has limited value as a rough measure of industry's economic health, when one time period is being compared to another, and only in the specific area for which the comparison is being made, e.g., western Canada. It is not a suitable yardstick with which to compare different producing areas of the world.

In May 1958, the Texas Railroad Commission estimated the scheduled allowable for the state as follows:

T.R.C. scheduled maximum efficient	
rate of production	6,235,000 bpd
made up of -	
100 per cent exempt wells	1,105,847
proratable wells	5,129,153

The above is, in effect, the potential for the state. T.R.C. calendar day allowable (estimated production) was 2,436,571 bpd which is 39 per cent of the estimated potential. This compares with Alberta's estimated ratio for May of about 34 per cent. However, one should really deduct the volume of 100 per cent exempt production in each case. This is a sizeable amount in Texas, due to the large number of stripper wells and waterflood projects, while it is a small amount in Alberta since the fields are much younger. If this is done, the Texas ratio then becomes about 31 per cent



and Alberta becomes about .30 per cent. In addition, potential from unconnected wells may be included in the potential figures but not in the production figures which gives a further error in the ratio. It is probably mere coincidence that the Texas and Alberta ratios are so close in May 1958.

In the Middle East, using Kuwait as an example, wells are spaced one per 5,000 acres in the Burgan field. In 1956, 200 wells produced at an average rate of 5,500 barrels per day per well or 1,100,000 barrels per day for the pool, which is presumably all the production that could be sold from this field in 1956. It is not correct to say that Burgan produced at 100 per cent of potential in 1956. With the extremely wide well spacing, it would have been relatively simple to drill more development wells in this field and perhaps achieve a potential that would be double or quadruple the 1956 potential. In fact, by applying the Alberta MPR formula to this field, including the development factor of 2.5, the MPR would calculate out to 8,797,500 barrels per day for the pool. Production in this instance is theoretically 13 per cent of potential; in reality the percentage is meaningless.

A large proportion of the increase in producibility of Alberta fields in recent years has been brought about by a re-interpretation of the maximum efficient rate for certain pools -- as production history is accumulated. The existence of



a previously unsuspected strong water drive or the establishment of some form of pressure maintenance, for example, will result in the authorities granting an increase in potential for a pool based upon satisfactory technical evidence being supplied them by the operators. In this way, increases in producibility are achieved purely by revisions in estimates (and decreases in producibility occur in the same manner). Changes in producibility of this nature have an important effect on the production to potential ratio, but they do not stem from any current development activity.

Thus, while some industries may have a good indicator of health in the ratio of production to capacity, no such yardstick exists in the oil producing industry.

Carrying this discussion further, and with particular reference to Alberta, it has been pointed out that the Alberta proration formula, in its present form, works to the advantage of the marginal well and that the economic allowance purports to give every well a sort of living wage. Therefore the excess producing potential is confined to the high reserve wells located in only a few pools which are controlled, in the main, by a relatively few operators. For these reasons, while the production to potential ratio may be useful in relating the market demand to growth of potential over a period of time, it in no way accurately reflects the economic health of the industry. Furthermore, in comparing one producing



area in the world to another, the ratio has no quantitative value. Perhaps there is a qualitative conclusion to be reached from observance of the low ratios in Alberta and Texas; namely, that under the North American land tenure system, a sensible balance between supply and demand is extremely difficult under conservation requirements in periods of oversupply. Under the concession system balance and conservation can be achieved with relative ease.

MONOGRAPH III. SOME FURTHER NOTES ON
PRODUCING ECONOMICS.

In the Calgary hearings, some cross-examination was devoted to "break even" economics in the producing industry. On page 10 of the Imperial submission, it was stated that "...on average the producing industry is earning a return of 7-12 percent. This rate must be considered a modest return on risk capital and no more than sufficient to attract new money at normal success ratios." These statements were supported by details given in Table IV on page 60 in Appendix "C" of the same submission. For illustrative purposes, the same calculations have been made using wellhead realizations 25 cents and 50 cents a barrel less than the average of \$2.52 per barrel which prevailed when the earlier submission was prepared. (Actually the present average price is about \$2.45 per barrel). The results were as follows:



Table I (a)

25 cent per barrel reduction

	<u>Future Worth</u>	<u>Present Worth @ 6%</u>		
		<u>Life of Well</u>		
		20 Years	25 Years	30 Years
Realization	2.27	1.47	1.36	1.17
Replacement	<u>1.30</u>	<u>1.12</u>	<u>1.10</u>	<u>1.06</u>
Margin before tax	.97	.35	.26	.11
Income Tax	<u>.33</u>	<u>.18</u>	<u>.15</u>	<u>.12</u>
Margin after tax	.64	.17	.11	(.01)

Rate of Return Range
(Investor's Method) -- 6 to 9%

Table I (b)

50 cent per barrel reduction

	<u>Future Worth</u>	<u>Present Worth @ 6%</u>		
		<u>Life of Well</u>		
		20 Years	25 Years	30 Years
Realization	2.02	1.30	1.21	1.04
Replacement	<u>1.30</u>	<u>1.12</u>	<u>1.10</u>	<u>1.06</u>
Margin before tax	.72	.18	.11	(.02)
Income tax	<u>.26</u>	<u>.13</u>	<u>.11</u>	<u>.08</u>
Margin after tax	.46	.05	.00	(.10)

Rate of Return Range
(Investor's Method) -- 4 to 7%

It will be seen that the rate of return in some of the above cases is actually less than the normal borrowing rate and would not pay the interest costs for the small operator who normally uses debt financing.

Once again, these economic calculations require considerable qualification. They stem from industry averages, and any industry average represents a wide variety of failures and successes. A wellhead price cut, to achieve an incremental volume addition, should not be judged entirely from overall averages.



As pointed out previously, incremental volume increases accrue to some companies and not to others. A price reduction could mean a direct loss to the producer who is already producing near his capacity. On the other hand, the operators of certain wells with low costs and high ability to produce can very well afford to make a wellhead price sacrifice to acquire an increase in market volume.

It has been shown that, under the North American system, the existing ratio of production to potential is not a good yardstick by which to measure the industry's economic health and its urge to continue development. Competitive and other forces are at work creating development pressures even in periods of oversupply. The actions of the "industry" are merely the sum of the actions of its component operating companies and individuals. If we look at the position of one company with one decision to make perhaps we can get a better insight into just how the economics work to encourage development drilling even when markets are restricted.

Consider a company that has an undeveloped 1/4 section lease in the Pembina field. Assume that the company paid \$200,000 for the lease at a Crown Sale and that it is expected to have primary reserves somewhere near the field average for the Cardium sand reservoir of 2,400 barrels per acre.

Using the current outlook for production from Pembina wells, the economics of the parcel (assuming the common 80-acre well spacing) would be about as follows:

TABLE II

	<u>Considering Acquisition Investment</u>	<u>Not Considering* Acquisition Investment</u>
Initial cash outlay	\$365,000	\$165,000
Ultimate Net Profit after income tax	\$135,000	\$335,000
Ratio of ultimate net profit to investment	0.37	2.0
Years to pay out initial investment	10.3	2.8
Rate of Return on Investment (By the Investor's Method)	10%	37%

* Assumed starting point since purchase money already paid out.

In judging these economics, the operator probably has these points in mind:

- (1) Proration guarantees some share of the market.
- (2) In this particular case, the future overall market outlook is not too important. The Pembina wells will have ability to produce somewhat in excess of the economic allowance for about four or five years but beyond then the economic allowance will be pretty close to the well capacity.

Now because the economic estimates are not discouraging, he is almost certain to drill. In many cases, the prices paid to acquire leases have been much higher than the figure used in the example



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and the total operation might show a loss. Even so, once the company holds the lease, the acquisition cost is sunk money. The decision on development must rest on the economic justification of the development capital costs only; these remain unchanged as in the second column of figures in Table II and they provide ample incentive for drilling. Existing ratios of production to potential play no part in the decision to drill.

It is probable that a Texas operator judges undeveloped properties on almost the same basis as we have described for the Pembina operator. The Middle East operator, on the other hand, would not drill the wells if he can produce his market requirements without them; he does not get a bigger share of the market by the simple virtue of having more wells. Thus, in North America, the decision to develop is an individual well decision, whereas elsewhere in the world it is an "increment of supply" decision.

It has been our conclusion that neither development nor short-term exploration are greatly affected by the production to potential ratio. The question of whether exploration will remain at a satisfactorily high level over the long-term future in the face of the present market outlook is also of very great importance. It has been pointed out in our brief that long-term exploration



is very largely a function of profit incentive assuming that prospects and political climate are favourable. It was also stated that, in the long run, exploration must be financed to a great extent from retained earnings and/or equity funds as opposed to debt sources. With these points in mind and considering the histories of the petroleum producing industry's revenues and expenditures in the United States, we believe that industry activity remains at reasonably high levels and, in fact, tends to grow when its cash input and output are roughly in balance.

While western Canada still shows a substantial deficit on a year-to-year basis, the ratio of revenues to expenditures has been increasing steadily in recent years and there are indications that this trend is increasing and that the gap will be closed completely towards 1960 assuming

- (a) a levelling-off of exploration activity at the relatively high level of 1957.
- (b) significant natural gas production (revenues reaching perhaps \$100 million per year) by 1961.
- (c) crude oil outlet similar to the Intermediate Case given on page 31 of Imperial's brief.

Recasting the cash-in-cash-out study,



assuming 20 per cent decline in exploration expenditures, no change in the gas revenue assumption above, and a crude oil outlet limited to the minimum case given on page 24 of our earlier brief, we see that the in-balance position is approached in 1960 also.

Even if the industry tried to maintain the 1957 level of activity under the minimum crude oil market case mentioned above, an annual cash balance position could be reached in about five years.

Further Aspects of Canadian Crude Oil Markets -- Summary.

Supply and Demand Analysis:

1. Eastern Canada has a somewhat complex supply system with a number of competitive elements. All these elements -- domestic crude, foreign crude, domestically refined products and imported products -- must be taken into account in considering the supply and demand pattern in projections in the future and the competitive potentials.
2. Export markets:
 - (a) It is not realistic to expect to secure both the Puget Sound and Montreal markets -- at least in the near future.
 - (b) Large potential markets for Canadian crude



will exist in adjacent United States areas.

3. Positive steps are required if Imperial's suggested "Intermediate Case" previously mentioned is to be attained.

Montreal Refiner's Position:

1. If Canadian crude were to move to Montreal, the Montreal refiner would have to secure higher prices over the long run.
 - (a) This would be necessary to cover the anticipated higher costs of Canadian crude oil.
 - (b) Even today no adequate margin exists to absorb added crude costs from profit.
2. For the Montreal refiner to cover the added cost through increased prices, he would need protection against other refineries in Montreal, refineries in the Maritimes and product importers.

Controls:

1. There are several types of controls which might be used to provide protection -- quotas, tariffs, subsidies or a combination.
2. All of these devices limit or equalize competition.
3. As a result, there is a tendency for one control to lead to another and perhaps ultimately to reach a system of price control.



Pipe Line Guarantees:

In the light of all these factors, it is hardly practicable for the Montreal refiners to guarantee a pipe line to Montreal.

1. There is a basic economic disadvantage and a loss of flexibility in the face of probable adverse trends.
2. There appears to be no reliable method of securing commercial assurance of a competitive price.
3. The route of controls for protection, as discussed above, is objectionable:
 - (a) because control begets control,
 - (b) no positive assurance can be given for an indefinite future.
4. Despite the above serious objections, the refiners are being asked to provide an unusually embracive guarantee to a pipe line. To complete the impracticability of this situation, there is no potential advantage accruing to the refiner to justify the high degree of risk sustained.

Further Aspects of Canadian Crude Oil Markets -- Discussion.

On the general subject of markets for Canadian crude, the present submission provides supplementary information in an effort to deal with certain questions and areas of confusion.



(a) The first section presents data and charts which it is hoped will be helpful in more easily visualizing the flow of crude and products throughout Canada, starting with 1957 as a base year and dealing with projections for 1961 with and without a Montreal pipe line.

(b) With this background, the position of the Montreal refiner under the Montreal pipe line case is further developed, and

(c) Possible governmental controls are discussed in the light of these logistics of supply to eastern Canada and the position of the Montreal refiner.

(A) Distribution of Petroleum and Petroleum Products in Canada 1957.

The distribution of petroleum and petroleum products in Canada to meet demands follows a rather complicated but natural economic pattern. This pattern is never constant, since demands change not only in the rate of growth but also in the relationship of individual petroleum products. Too, areas of supply are constantly changing. We have witnessed a period of rapid refinery construction across Canada during the past ten years, associated with tremendous new producing and transportation facilities, which have greatly reduced the relative importance of imports of petroleum and petroleum products.



Thus, the Canadian oil industry is dynamic and constantly changing. We have prepared a chart (Chart #1) which illustrates graphically and statistically the demand for and the supply distribution of petroleum and petroleum products in the various geographical areas of Canada during 1957. The red arrows indicate crude movements and the blue indicate product movements. Commencing on the west coast, the table shows a total domestic demand in British Columbia of 78,000 B/D. In addition, 5,000 B/D of products were exported, principally for the United States armed forces. This total demand was supplied by local refinery production of 61,000 B/D running on Canadian crude, product imports of 14,000 B/D from United States sources, and product transfers from Alberta of 7,000 B/D. Product imports from the United States consisted principally of middle distillates and heavy fuel required to balance demands which could not be met by local refinery production due to the natural product yield relationship in the crude run. Transfers from Alberta consisted of product movements which could be supplied more cheaply from refineries located there than from British Columbia refineries. The balance of supply comprised 1,000 B/D of local natural gas liquids production. The chart shows an export of 94,000 B/D



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7026

of crude petroleum from British Columbia which
moved from Alberta via Trans Mountain Pipe Line
to refineries in the United States Puget Sound
and California.



The prairie petroleum demand is shown as 153,000 B/D, plus 56,000 B/D of crude petroleum exports to the United States mid-west. The total was supplied locally by domestic production with the exception of 3,000 B/D of product imports from the United States. These imports consisted of aviation gasoline, not available on the prairies, and other products such as lubricants, additives and other materials not produced there.

Moving to eastern Canada, the chart becomes more complicated in view of the various supply lines which have been built to meet local demands.

The Ontario demand in 1957 amounted to 253,000 B/D and 2,000 B/D of various products exported to the United States. This was supplied by local refinery production of 159,000 B/D, using 135,000 B/D of Canadian crude (including 2,000 B/D from Ontario), 22,000 B/D of foreign crude, principally United States, and 2,000 B/D out of inventory. In addition, 70,000 B/D of products were transferred from Quebec to Ontario largely via the Trans Northern Pipe Line and Great Lakes shipping; 23,000 barrels per day of products were imported from the United States and Caribbean sources, comprised mainly of middle distillates, heavy fuel and other products such as lubricants, additives and other chemicals not available from Canadian sources. Finally, to complete the Ontario supply picture, refinery utilization



of 1,000 B/D of natural gas liquids and 2,000 B/D of products withdrawn from inventories should be included.

Petroleum demand in the Province of Quebec totalled 192,000 B/D in 1957. In addition, Quebec refineries supplied 70,000 B/D of products for transfer to Ontario, noted previously, and 6,000 B/D for transfer to the Maritimes. Thus, the total demand amounted to 268,000 B/D. This was supplied entirely from foreign sources. Crude petroleum imports totalled 243,000 B/D, about 80 per cent coming from Venezuela and the balance from the Middle East and United States. This was supplemented by products imports of 28,000 B/D, made up of aviation gasoline which is not available from local production, minor volumes of motor gasoline and additives, but principally middle distillates and heavy fuel required to balance refinery yields with domestic demand. These product imports move from the United States Gulf and Caribbean refineries. In 1957 3,000 B/D of products were added to inventories.

The Maritimes are also dependent on foreign sources for their crude petroleum and product requirements. Their demand of 71,000 B/D and 1,000 B/D for export to east coast United States military establishments were met by importing 41,000 B/D of crude from Venezuela



for local refinery running 6,000 B/D of product transfers from Quebec, and 26,000 B/D of product imports. These product imports are similar in character to those in Quebec to the extent that they are of a kind not manufactured in Canada, are required by jobbers who are not refiners, or are required to balance refinery yields to meet local demand. Of the total supply, 1,000 B/D was added to inventories during 1957.

The summary for Canada as a whole thus shows a total domestic demand for crude petroleum and products of 747,000 B/D and exports of 158,000 B/D during 1957. This was supplied by Canadian crude production of 498,000 B/D, natural gas liquids and other materials of 9,000 B/D, crude imports of 306,000 B/D, product imports of 94,000 B/D, and a net increase in inventory of 2,000 B/D during the year.

1961 - The Intermediate Case.

By 1961 the flow of crude and products in Canada will change appreciably to supply an enlarged market. The demands for individual petroleum products will more nearly approach balanced local refinery yields, and with the addition of new refinery facilities, product imports will decline. We are forecasting in our Intermediate Case that the Ontario market could be supplied almost entirely from domestic sources,



while eastern Canada continues to depend on foreign sources. Chart #2 illustrates graphically our Intermediate Case where positive steps are taken to increase markets for Canadian crude short of Montreal.

It is estimated that British Columbia petroleum demand will increase to 95,000 B/D by 1961. This will be supplied by local refining of 78,000 B/D of Canadian crude, natural gas liquids production of 2,000 B/D in the Peace River district of British Columbia, product transfers of 5,000 B/D from Alberta, and product imports of 9,000 B/D from the United States. Thus, it is contemplated that British Columbia refiners will be able to supply a larger share of their enlarged market, and product transfers and imports will decline from 1957 levels. By that time, 110,000 B/D of Canadian crude might be exported to United States Puget Sound refiners.

The increased demand on the Prairies will continue to be supplied from Canadian sources, including 3,000 B/D transfers of products from Ontario. Crude exports to the United States Mid-West are forecast to reach 83,000 B/D by 1961.

The greatest change is indicated to occur in Ontario. Petroleum demand is forecast to reach a level of 319,000 B/D, nearly all of which could be supplied from domestic sources. Demand



for Canadian crude will more than double from 1957 to a level of 293,000 B/D, no foreign crude imports being contemplated. Product imports could decline to a level of 5,000 B/D, entirely representing products not available in Canada. Product transfers from Quebec are forecast in this case to reduce to a level of 21,000 B/D assuming the dividing of the Trans Northern product line. Ottawa Valley requirements will continue to be supplied more economically from Montreal sources and represent most of the 21,000 B/D.

In Quebec, petroleum demand will reach a level of 245,000 B/D, and in addition this area will supply 21,000 B/D of products to Ontario and 6,000 B/D to the Maritimes for a total crude petroleum and product requirement of 272,000 B/D. Supplies will be derived from foreign sources, including 235,000 B/D of crude for running in Montreal refineries, and product imports of 37,000 B/D to balance crude yields with demand. It is thus forecast that crude imports into Quebec will be at about the 1957 level, while product imports to balance refinery yields will increase slightly.

With the completion of a second refinery in the Maritimes by 1961, foreign crude imports will increase appreciably in that area to a level



of 73,000 B/D, while product imports will decline to a level of 15,000 B/D. The transfer of 6,000 B/D of products from Quebec fulfills the supply requirements to meet an increased demand of 94,000 B/D.

In summary, then, total requirements, domestic and export, are estimated in this case to reach a level of over 1,100,000 B/D by 1961, of which a larger portion will be supplied from western Canadian sources. Canadian crude production could increase about 47 per cent, while crude imports would continue at 1957 levels. Product imports from the United States and other foreign sources will still be required in many areas to supplement local production, but on a reduced scale.

Let us examine in a little more detail the growth in Canadian crude oil markets. We are forecasting that under this case Canadian crude oil production, during this period, could increase from a level of 498,000 B/D in 1957 to 731,000 B/D in 1961. A detailed tabulation of this forecast is set out hereunder:



ESTIMATED DEMAND FOR CANADIAN CRUDE
MB/D

	<u>1957</u> Actual	<u>1959</u>	<u>1960</u>	<u>1961</u>
Canadian Demand				
British Columbia	61	69	74	78
Prairies	149	150	154	160
Ontario	133	264	279	293
Pipe Line Fuel	<u>5</u>	<u>6</u>	<u>6</u>	<u>7</u>
	348	489	513	538
Exports				
Puget Sound	74	65	95	110
Mid-West	56	70	76	83
Offshore	<u>20</u>	<u>-</u>	<u>-</u>	<u>-</u>
	150	135	171	193
	<u>498</u>	<u>624</u>	<u>684</u>	<u>731</u>

This indicates that Canadian demand will account for the largest portion of the overall increase. Demand in British Columbia and the prairies will increase with the growth in these markets for petroleum products coupled with a declining dependence on product imports. In Ontario a number of factors could be responsible for a more than doubling of the Canadian crude demand. Market growth and the elimination of crude imports into this area would provide 50 per cent of the increase. The declining rate of growth for heating oils will assist local refineries to balance product yields with the demand for individual products thereby reducing product imports. This will account for 10 per cent of the growth. Finally, we are projecting a



sharp decline in product transfers from Quebec and an increasing supply of the Ontario market from Ontario refineries. This would involve a policy decision by the owners to reverse the Trans Northern products pipe line west of Ottawa, the Ottawa Valley continuing to be supplied from Montreal.

The United States market for Canadian crude has suffered severely during 1958, particularly on the west coast. We have indicated the reasons for this sharp reduction in our previous brief to the Commission, which include declines in business activity, no growth in petroleum demand, serious overstocked supplies on the entire west coast, the impact of natural gas, and the United States import quotas which as they stand today indirectly prejudice Canadian crude. However, it is our belief that most of these factors are short term in their effect, and that the demand for Canadian crude can increase in that area. We have examined the historic growth rate in the demand for crude oil equivalent to the demands for gasoline and middle distillates, covering the states of Washington and Oregon, for the period 1947 to 1957. The data are set out in Chart #3, which shows an approximate doubling in demand during the period. Until 1955 supplies for the area were derived almost entirely



from sources outside these states. During that year, however, new refineries built in the Puget Sound area commenced operations using almost entirely Canadian crude. The data are indicated on the chart. With the completion of new refineries in the area, local refinery runs will provide an increasing share of the area's demands. We are forecasting that Canadian crude exports will continue at less than the 1957 level through 1959, but exceed this by 1960. A wide margin for potential future long-term growth is indicated.

A similar study has been prepared for the United States mid-west area of Minnesota, Wisconsin and Michigan covering the period 1947-1957. (Chart #4) Petroleum demand in these states has also about doubled in the eleven-year period. Like the United States Puget Sound, this tri-state area is oil deficient. Refinery runs continued at about a constant level for some years following which new refineries were constructed dependent almost entirely on Canadian sources. A conservative growth in use of Canadian crude is forecast for the short-term period, but here again the large long-term potential is evident.

The Montreal Market.

The movement of Canadian crude to Montreal would, of course, alter appreciably



the supply distribution pattern forecast in our Intermediate Case. (See chart #2) As indicated in Chart #5, there would be lower exports of Canadian crude to the Puget Sound area of the United States. It is difficult to estimate how much this might be but it has been placed in this estimate as an initial reduction of 80,000 B/D. This is a reflection of the conclusion that Canadian crude cannot realistically expect to secure both the Montreal and Puget Sound markets. The normal pressure to provide outlet for Canadian crude in the Puget Sound area is transformed in the case of a Montreal pipe line to a pressure to find a partial home in Puget Sound for the foreign crude oil displaced from Montreal.

The estimate of crude requirements for Montreal assumes the logical supply of Ontario markets (except the Ottawa Valley) from Ontario refineries, thus avoiding a transportation back-haul if refinery crude supplies are to come from the west.

Since specialty crudes will be required by Montreal refiners from foreign sources for the manufacture of lubricants, asphalts and other specialty products, it is unrealistic to assume that Canadian crude shipments could displace all crude imports into that area. Assuming a line were built by 1961-1962, an initial movement of



about 200,000 B/D might be reasonable under these circumstances. Product imports into Quebec will still be required to balance refinery yields to demand and to provide specialty products not manufactured in Canada.

These projections of crude and product imports into Montreal at these minimum levels assume, of course, that somehow a satisfactory method of taking care of the Montreal refinery's economic problem has been reached. This would appear to be a suitable point at which to re-examine that problem.

(B) Problems of the Montreal Refiner:

Each of the Montreal refiners who has testified before the Commission has expressed a reluctance on economic grounds to committing himself to the running of Canadian crude at Montreal. Evidence has been presented showing that Canadian crude at present prices would lay down at Montreal at a disadvantage versus current sources of supply. This would still be true even if oil from western Canada could be moved at the extremely low pipe line rates suggested as being feasible under certain conditions of refinery guarantees of the risk. The refiners, however, contend that they cannot afford to assume such risk in underwriting a pipe line and tying themselves for the long term to Canadian oil with no reasonable assurance



that it will be made and kept competitive with alternative sources of supply. In fact, all signs point to the probable future widening of the gap between prices of Canadian and foreign crudes laid down at Montreal due to basic competitive cost advantages of the latter.

It has been suggested by some that this gap need not widen, on the basis that a reduction in foreign crude prices would be directly reflected in United States crude prices which in turn would be followed by Canadian prices. Events of recent months, however, have shown that United States crudes no longer meet foreign crudes at seaboard on a fully competitive price basis (otherwise why the scramble for import quotas?) and that import quota limitations provide the insulation permitting such price disparity. Thus, if Canadian crude is to continue to be priced on the "continental" basis that has been recommended, it appears probable that its competitive position versus foreign crude at Montreal will deteriorate in the future.

In any event, the Montreal refiner feels that a fixed commitment to run Canadian crude would eliminate his flexibility for the future in securing for his market the cheapest alternative source of supply in the rapidly changing world oil picture.



The question has been raised as to why, if the refiner values flexibility, we find various types of guarantees used in a number of cases to finance oil pipe lines. In a few cases the agreements contain specific throughput guarantees which are, however, invariably limited in scope.

(The throughput agreement of October 1, 1949, between Imperial and Interprovincial is typical. Therein Imperial covenants that there will be physically tendered by Imperial and/or others for shipment through the Interprovincial system during each year petroleum in such quantities as will be sufficient to provide an average daily throughput for each calendar year of 59,673,000 barrel/miles. This barrel/mile figure is, of course, a small fraction of the Interprovincial throughput which, for example, is currently more than five times this minimum barrel/mile figure. Furthermore, with no specific refinery destinations committed it is obvious that a high degree of flexibility was retained.)

In others, deficiency agreements have been made guaranteeing bond interest and amortization but retaining considerable flexibility in that no commitments supporting equity interest in the pipe line is made. Finally, increasingly popular in recent years are shipping agreements where no guarantee of throughput or of revenue is given



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7040

to the pipe line company. These shipping agreements state merely that if and to the extent a shipper is transporting crude oil from the fields served by the pipe line company to the markets reached by the pipe line, such crude oil will be shipped through the pipe line company's system.

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All these forms of guarantees, where they exist, have one thing in common and that is that they are in fact provided by companies sponsoring the pipe lines in return for anticipated economic return against the risk taken. Where integrated companies are involved it is a mistake to conclude that they are necessarily acting on behalf of their refining interests. Thus, in the case of Interprovincial and Trans Mountain pipe lines, Imperial's guarantees were given in the interests of its producing, not its refinery, functions. Where refiners give throughput agreements (which are invariably limited in scope) they do so where there is no equally economic alternative supply prospect, or where competitive price flexibility is guaranteed by the supplier. Thus, a Montreal refiner would want a reliable guarantee of continuing price competitiveness before he would willingly give up his flexibility of supply source.

Without such guarantee (which it would appear the western Canadian crude oil producer is hardly in a position to give) the Montreal refiner contends that use of Canadian crude would add to his costs. If he is to stay in business, two results appear to follow:

- (1) He must charge the consumer more for his products over the years than would otherwise be the case, and



- (2) In order to do so he must be provided with adequate protection against suppliers using lower cost raw material.

With regard to the first of these, the need for higher prices to the consumer has been questioned, and this subject appears to require some clarification both on a current and long-term basis.

At the present time refiners in Canada enjoy duty protection averaging about 18 cents per barrel of crude oil which is equivalent to a protection of about 4%. A list of reasons justifying this minor protection was set forth in Imperial's previous submission (page 28) and will not be repeated here, since the essential question is whether, in fact, Montreal refining is such a lucrative business that increasing costs of crude oil can be readily absorbed by the refiner.

Some piecemeal data reflecting certain tank wagon prices were introduced into the questioning at Calgary in an effort to show that Montreal prices in these cases were not as far below those in Toronto as were crude costs and that, therefore, Montreal refiners could accept higher crude prices. The competitive oil marketing situation unfortunately is not as simple as such spot comparisons would imply. A refiner's or refiner-marketer's net revenue reflects the composite of all the prices received and costs



sustained in moving all of his joint products to various classes of trade in the areas which he serves. It cannot be expressed in the simple index, for example, of the tank wagon price at which gasoline is sold to the service station at a particular location. With a series of joint products having many qualities made from his crude, the competitive price he can obtain on each one affects the price he can afford to take on another - - for example, a lower bunker fuel price means that more revenue must be obtained from other products if the refiner's overall margin is to be maintained. Different competitive prices develop on different classes of trade - - retail, industrial/commercial, farm, distributor, jobber, government bid business, etc., and the relative proportion of these classes served will affect the net-back. A given refinery will net-back different values from some portions of the areas it serves than from others, depending upon the location of competitive sources of supply. The only way all of these complexities is measured is in the final profit results shown for the operation as a whole.

At the Calgary hearings, Imperial stated that actual earnings of its refining-marketing operations in Quebec during the relatively good year of 1957 amounted to between 7 and 8% on the total capital employed. Detailed supporting figures



were submitted to the Chairman. This return is approximately the same as that earned by Imperial's refining and marketing for the country as a whole and appears quite modest for a commercial venture of this type.

With the deterioration in the competitive oil picture, profit results this year are running well below those of last year. In the case of Imperial, figures for the last three months available show profit on refining-marketing in Quebec falling to less than 2-3/4% on capital employed. It would appear clear that when the competitive position permits, some increases in prices are called for, and if at that time the crude price to the refiner should be higher the increase in product prices required would be correspondingly greater.

While as a generality product prices may temporarily run too low or too high, they must in the long run average out at a reasonable rate of return if an operation is to be maintained and free competition exists. This means that in the long run consumer prices must reflect increases or decreases in costs of the supplier. Thus, if refinery operations are to continue, higher or lower costs of crude oil to a Montreal refiner must in the long run be reflected in higher or lower prices to the consumer than would otherwise be the case. It would seem that this may be what



Mr. Walter Levy was indicating in his footnote on page III-18 of his report, which states;

"...in the long run it (a crude oil import duty) could be a factor bearing on the allocation of resources and the costs of production and consumption".

If a refiner pays a higher price for crude delivered at his refinery and attempts to secure the necessary increase in product prices he will be unable to do so and will gradually go out of business unless he is protected from lower cost competitive suppliers. Specifically a Montreal refiner running Canadian crude would require protection against three classes of competitors:

- (1) Other refineries in Montreal running foreign crude,
- (2) Refineries in the Maritimes which could move into Quebec products refined from cheaper foreign crude,
- (3) Product importers.

In order to provide such protection, extensive government controls would be necessary. It appears desirable to examine more closely what types of controls might be established.

(C) Controls:

There are three possible methods by which the government might afford protection to the



Montreal refiner running Canadian crude. The methods are:

- (a) Volumetric quotas
- (b) Tariffs
- (c) Subventions

(a) Volumetric quotas:

How might these be applied so as to protect against the three types of competition mentioned above?

- (1) Competitive equality with other Montreal refineries could be easily and simply obtained by establishing quotas permitting crude oil to be imported by all Montreal refineries at a specified percentage of total crude runs. For example, all Montreal refiners might be required to use 75 or 80% of Canadian crude. Administratively the problem would be relatively simple, though careful accounting procedures and provisions for adjusting unbalanced positions by periods would be needed.
- (2) Protection against shipments of products from Maritimes refineries presents a somewhat more difficult problem. In this case, it would appear necessary to restrict the normal growth opportunity of the Maritimes refiner by limiting him to importing crude only for his requirements in the Maritime



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provinces. This would necessitate his accounting for the destination of all his shipments. It would be particularly awkward where, as usually happens, a refiner's yields do not correspond to his sales requirements, and his runs would be limited by the product requiring the least amount of crude. Possibly provisions could be made permitting shipment to Quebec provided that on this volume Canadian crude would be purchased in the same percentage as by the Montreal refiners. This would pose an economic problem.

- (3) The real difficulty with the volume quota, however, would be met in connection with product imports. Product imports, particularly on certain products, provide the balance wheel in equating supply against demand. It is very difficult to guess accurately the difference between two large figures representing supply and demand. If the administrative guess were wrong, adjustment would tend to come too late to avoid either a distress overstocked position if played safe or a possible market shortage if played close.

A real problem would be involved in determining what importers would receive what



quotas and how they would be policed. If put on an historical basis, it would tend to freeze all competitive positions, and on any other basis would be subject to criticism for favoritism.

Should quotas be applied to all products or only some and what provinces should they cover? An answer to such questions would have to be worked out.

Briefly, volumetric quotas would appear to have all the ear-marks of the wartime type of control. They can be made to work but eliminate most free competition and pose real administrative headaches.

(b) Tariffs:

Tariffs would be administratively considerably easier than full volumetric controls. However, they would not necessarily be as effective in keeping import volumes at the desired level.

Establishment of the proper level and adjusting it to meet constantly changing conditions would be extremely difficult. It would be necessary to tread the narrow path between a level that would let in too much in the way of imports on the one hand or one that would tend to unduly penalize consumers on the other.

The increased rates of duty (which would not apply in the case of those imports permitted



under a straight quota system) would add further to the suppliers' total costs and hence to consumer prices. Because tariffs are of necessity country-wide, the consumer in the Maritimes, for example, would have to pay a higher price for his products compared to the quota system. Such higher prices could well lead to loss in business, particularly for petroleum fuels.

(b) Subventions:

A direct method would be the payment of government subsidies to represent the difference in laid down cost of Canadian crude at Montreal in comparison with foreign competition. This method has the advantage of requiring no further types of controls on crude and product imports and does not result in higher prices to sections of the community.

It would, of course, involve constant haggling with respect to the proper size of the subsidy. It might also from a political standpoint prove a little difficult to convince the average taxpayer that the growing Canadian petroleum industry of the future is a depressed industry requiring such special subsidy and tempt him to suggest some form of profit control.

It must be recognized that all of the methods of protection discussed either freeze outside competition or equalize it to the Canadian level.



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Under these circumstances, it would be most surprising if over the next score of years someone, who might not even be familiar with the present Commission hearings, did not propose that in the absence of potential outside competition the Canadian crude price should be regulated. It has been suggested that by maintaining Canadian crude price at parity with United States crude at Sarnia such possible regulation could be avoided. This is another way of saying that, in effect, the price might be regulated at that level. However, with no effective potential competition from United States or other crude oil under the proposed schemes for protection, it is doubtful how long everyone would be satisfied to go along unquestioningly on this basis.

It is to be hoped that the picture just drawn as to the pitfalls that might be associated with controls is an overstatement. However, we must not close our eyes to these possibilities. An interesting example of how controls tend to pile upon controls is given in a recent article from Petroleum Week (May 23, 1958) entitled "How Do Strict Controls Affect An Industry? - Look at Sugar". This traces the history in the United States sugar industry of controls which now cover all phases of the industry. While some people relax and enjoy it, others make statements such as "We do not think much



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7051

of the Sugar Act because it rigs our markets. The government shouldn't be in the business of fixing prices and setting quotas. The government shouldn't be in the position of telling us how much candy we can market.



The system has also built up an immensely complicated bureaucratic machiner subject to continual politicking -- everyone is trying to obtain more for themselves at the expense of others. The Agriculture Department can inspect our books to evaluate our profits." It is possible to operate the United States sugar industry under such conditions but it does not follow that the Canadian petroleum industry would wish to sacrifice its freedom of action or could operate its type of business with full effectiveness under limitations of this sort.

Even assuming some initial form of protection wereestablished, could the Montreal refiner from a practical point of view afford to take the risk of guaranteeing the pipe line? The one thing certain about long term forecasts is their uncertainty and over a period of ten years or longer supply and demand factors will turn out to be much different than foreseen today. Canadian supplies nearer than Alberta might become of importance. Alberta oil might be needed elsewhere. Adjustments to the protective regulations would have to be made to keep up with changing events, but could it be assumed that such adjustments would invariably be to the satisfaction of the refiner? Governments change and international trade policies change. Finally, there would be no potential economic advantage to compensate for assuming such long term added risk.



--- A short recess.

MR. WHITE: Mr. Cogan will deal with aspects of the pipe line matter.

MR. COGAN: PIPE LINE\TRANSPORTATION TO EASTERN CANADA.

1. Major factors affecting pipe line tariffs: There are a great many factors that contribute to determining what a suitable pipe line tariff should be for a given movement but this discussion will be limited to commenting on two key factors to which pipe line tariffs are very sensitive:

(a) Volume of Throughput: At a given tariff the revenue of a pipe line varies directly with the volume of throughput but for a given pipeline the total daily costs of operation are relatively insensitive to such volumes. Let us assume, for example, a 350 million dollar pipe line with a tariff established on a basis of an estimate of 320,000 b/d throughput. If this estimate should prove to be too high by, say, 50,000 b/d, it would require an increase in tariff of perhaps seven to eight cents per barrel to maintain the anticipated pipe line return.

(b) Rate of Return: The tariff established is very sensitive to the rate of return required on the capital involved. Again dealing with the



example of a 350 million dollar pipe line, 1 per cent net return after taxes on this total sum of money is equivalent to seven cents per barrel on a throughput of, say, 275,000 b/d. The rate of return that is required to attract the necessary funds depends upon the risks involved and the timing as to when the return is realized. It is obvious that if the risk is essentially removed a relatively low rate of return is satisfactory with the converse being equally true. It is also clear that if the return is deferred for a considerable period, a higher average return is required than would be the case if a steady return were secured from the outset. For example, if a project starting with 0% return were to improve by 4% each year to reach 40% after 10 years there is an apparent arithmetic average return over the period of 20%. However, the potential investor could secure the equivalent return over the 10 year period if he placed the same funds in an investment paying a steady 10% throughput.

2. Montreal Pipe Line proposal of Home Oil:

In the last few days we have had an opportunity to make a preliminary review of the new Home Oil proposal for a pipe line to Montreal. It is our general reaction that on the basis of the premises used the Dutton-Williams report is a workmanlike



job and we do not wish at this time to haggle over differences in investment or operating cost estimates. Our principal concern has to do with the sensitive factors mentioned in the general discussion above.

Thus, with respect to the volumes of throughput it is our belief that the figures are optimistically high. Specifically, the assumption appears to be made that with a pipe line to Montreal it would soon become possible to eliminate completely product imports into the province. We do not believe this is realistic in view of the necessity for importing certain specialty products, the need for importing distillates to supplement the maximum refinery yield and the need to import bunker fuel from an economic standpoint. Our rough estimates indicate total product import volumes of 50,000 to 60,000 b/d. In addition, the demand estimates for the markets involved are somewhat higher than corresponding estimates which we have been using. We recognize that forward demand estimates involve a considerable measure of opinion but we do feel that there is a strong probability that the figures used may prove to be on the high side.

With respect to the rate of return shown on the pipe line project, the level appears to be relatively low, particularly when it is taken into account that the more attractive levels of return are deferred for a number of years. Whether or not this projected return would be adequate to permit



financing the pipe line project would seem to depend upon the extent to which risk has been removed from the pipe line project by guarantees from others.

In our opinion, the rates of return indicated would not be adequate to attract capital under what we would normally consider to be a commercial pipe line arrangement where guarantees are limited to coverage of part or all of the borrowed funds. The returns might be adequate for financing if refiners were to go further and guarantee volumes that would assure a return on the equity funds invested.

We are not clear as to the type of guarantees proposed for the revised pipe line project. In the case of the earlier proposal discussed at Calgary, it was indicated that a 15-year throughput guarantee would be required with volumes increasing from 200,000 b/d the first year to 320,000 b/d in the fifth year. Since the revenue from such volumes would appear more than adequate to assure the servicing of the borrowed funds, it was our conclusion that the proposal envisaged a guarantee of at least some return on the equity invested. A guarantee of this type by a refiner who is assuming a large risk with no potential advantage did not appear to us to be a commercial proposition. (Of course, this was written before the discussion that took place yesterday afternoon. We understood that



the volume of gas delivered would be 260,000 barrels per day to Montreal and 75,000 barrels per day to Superior. According to the Dutton-Williams report, on page 15, these volumes of 260,000 and 75,000 respectively are the volumes anticipated for the years 1962 and 1963. If at the same time we look at page 104 of that report, giving the financial data, it shows that the years 1962 and 1963, when these volumes would be the applicable volumes, show a return on common stock of 4.8 and 9 per cent respectively, or an average of 6.9 per cent, on such volumes. So, as far as I am concerned, I am still mystified -- that is all I can say at the moment.)

3. Alternative pipe line transportation to eastern Canada: It was implied in the Calgary hearings that Interprovincial Pipe Line has become obsolescent and that the only way to secure cheap transportation to eastern Canada is through the inauguration of a new system. It is our contention on the contrary that not only has Interprovincial demonstrated its historic worth but can also continue its logical development as a most efficient vehicle for handling additional volumes of crude oil to Ontario or eastern Canada.

While it is true that the present system includes certain smaller diameter pipe (which is very useful in providing flexibility of shipments),



it is perhaps not generally recognized that a main line system made up of 24, 26 and 30" pipe extends the entire distance from Edmonton to Sarnia. This is not small pipe. Cheaper transportation to Ontario awaits only the increasing barrel/miles to be contributed by expansion of the Ontario market for Canadian crude, which is developing and which we believe should be fostered.

Our analysis indicates that the Inter-provincial system is readily adaptable for large increased movements at very low costs and with a high degree of flexibility. Barrel/mile figures comparing most favourably with an entirely new large system are indicated when the two are placed on the same basis of guarantees and financing.

MR. TWAIT: REGULATION OF OIL PIPE LINES.

The Commission has requested further information in regard to the recommendations contained in our original submission in respect of oil pipe line regulations. These were distinguished from gas pipe line regulations where conditions are quite different. We will attempt to deal with the former in terms of a number of questions submitted by the Commission as follows:

- (1) Imperial recommended against the single or exclusive permit system for crude oil pipe lines and the question has been raised as to whether or not a multiple permit system would promote



virtual control over pipe lines by major refining companies.

Possibly, the Commission has not been informed of recent changes in the legislation and practice in Alberta with respect to crude oil pipe line construction. Alberta has, in fact, made a clear distinction in this respect between gas pipe lines and crude oil pipe lines. It has recently granted what appear to be multiple permits for crude oil pipe lines in a single area. We would suggest that the experience of the Alberta government over a period of some years with the exclusive permit system for crude oil pipe lines would be of interest to the Commission.

In the United States, the exclusive permit system is not applied to crude oil pipe lines. Consequently, there is competition between capital and companies to provide the most economic transportation for gathering or trunk line transportation.

In our opinion, the question of a monopoly position in pipe lines would not be aggravated by elimination of the single permit system. On the contrary, it would appear that the actual or potential competition from a new line would tend to lessen any monopolistic features resulting from the present system. It would appear that inasmuch



as refineries are the only customers of a crude oil pipe line (contrary to a gas pipe line), they are certain to take a vital interest in crude oil pipe lines, regardless of whether a single permit, multiple permit or no permit system is in effect. In the event that as a result of such interest, any troublesome developments arise in the monopoly field, there is always present the existing legislation to protect against such undesirable practice and government control can remain, even though the permit system is modified or abolished.

(2) Imperial also recommended that the economic and financing aspects of the pipe line application need not be reviewed by the Board of Transport Commissioners but rather should depend on the tests of the money market. The question has been raised as to whether or not this recommendation would lead to a strong monopoly.

We find it difficult to see any connection between this recommendation and the possibility of monopolies. It would appear that if the Transport Board did not review the economic aspects of a pipe line application, the "entrepreneur" applicant would benefit by avoiding the present "hen and egg" situation whereby he cannot secure throughput assurances from refiner/purchasers before he has a permit and conversely, cannot secure approval of the permit without purchaser guarantees. Rather than encourage



monopoly, it would seem that Imperial's recommendation offers a better basis for the competitive development of pipe lines than the present exclusive permit system which does insure a monopoly for the permit holder. In short, under the exclusive permit system, the applicant has to pass both the economic examination of the Board and the financial test of the money market. If one of these tests is eliminated, the opportunity to enter the pipe line business would be facilitated, rather than retarded, and consequently our recommendation in no way contributes to monopolistic control.

---(Page 7063 follows.)

(3) Imperial pointed out the problem of overlapping jurisdiction between federal and provincial governments and suggested in testimony that this might be corrected by elimination of certain systems by definition. The question has arisen as to how this might be accomplished. Certain provinces, and Saskatchewan in particular, wish to exercise jurisdiction over "gathering" systems whether or not they connect directly or indirectly to interprovincial pipe line systems. In at least two instances, the Board of Transport Commissioners have held that gathering systems which are connected to interprovincial systems are under federal jurisdiction, even though such gathering systems are wholly within one province. It would not appear possible, accordingly, to define gathering systems and place them under provincial jurisdiction. However, a similar problem in other industries, such as the marketing of agricultural products and the operation of bus and truck concerns, has been solved, at least on the surface, by delegation. We believe that if the federal and provincial authorities could reach agreement between types of pipe line systems which are to be under provincial jurisdiction, then the federal government by appropriate legislation could delegate the necessary control to provincial



boards. In effect, the federal government would be delegating for practical purposes, some of its responsibilities under the B.N.A. Act. Provincial boards already exist in most provinces to accept such delegated authority. It is suggested that federal legislation, patterned after the Motor Vehicle Transport Act of 1954, could provide that the Governor-in-Council could declare a pipe line system or any part thereof, to be from the date of declaration under provincial jurisdiction. It would not be necessary to define a jurisdictional division as each proposition or pipe line system would be considered separately. The Governor-in-Council could revoke any such declaration. Accordingly, the federal government has the final decision as to the division of control with respect to crude oil pipe lines nominally under federal jurisdiction. Main interprovincial trunk lines would remain under federal jurisdiction and the control of the Board of Transport Commissioners. Local or provincial lines would remain under provincial jurisdiction and the control of provincial authorities. All gathering lines in a field and spur lines connecting the gathering lines to an interprovincial trunk line could be placed by order-in-council under provincial control. This will require



federal-provincial co-operation but so will any solution to this jurisdictional dispute. We continue to believe that if some resolution along the lines indicated above to eliminate the jurisdictional conflict is not obtained in a short time, serious difficulties will arise.

- (4) Imperial suggested in its submission that rate regulation of oil pipe lines was unnecessary and that the constant pressure to reduce transportation costs in order to secure the maximum wellhead price and incentive for exploration was in itself a continuing protection. The question has risen as to how a transporter appeals rates if the Transport Board does not regulate rates.

In making the foregoing recommendation, it should be noted that Imperial did not advocate the abolition of the power to regulate rates or of the power to declare a pipe line to be a common carrier. While suggesting that experience in practical operation had demonstrated that rate-making as a regular practice was not necessary, we, at the same time, recommended that this power be left with the Board of Transport to exercise if and when deemed necessary.

In endeavouring to answer these specific questions, we should point out that Imperial's



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recommendations with regard to crude oil pipe line regulations are based on the experience of the past nine years, during which time the problems of the present form of regulation, both federal and provincial, have become apparent. We believe that our recommendations can be justified in the light of this experience and that in considering them, the Commission should obtain the private views of not only the provincial boards, but also the Board of Transport Commissioners who have the practical problem of applying such regulations.

NATIONAL SECURITY ASPECTS OF A MONTREAL PIPE LINE: This is a subject requiring the judgment of the best informed military and political opinion. We thus do not feel qualified to do more than point out a number of factors which presumably would be included with those receiving consideration in arriving at such a judgment.

Basically Canada's oil security problems appear essentially identical with those of the United States and have been so treated in all emergencies to date. This is not a one-way street, as the transportation savings potentially available to the United States west coast by the Trans Mountain Pipe Line, if used to capacity, are more than equal to the full transportation required to supply eastern Canada from the United States Gulf or Caribbean. Thus, in fact, the Trans Mountain Pipe Line system



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gives assurance of supplies to eastern Canada in any emergency. Also, as was pointed out by Mr. Rea in his testimony, aided by the Seaway it would in fact be possible to tie eastern Canada if need be into the network of United States pipe lines reaching the Great Lakes area.

In viewing, therefore, the North American oil security picture, it is necessary to consider what type of emergency is envisioned. Four possible types are as follows:

- (1) An emergency short of war such as temporary loss of Middle East supplies. Flexibility of supplies from other sources appears sufficient to protect essential North American needs. This was demonstrated during the Suez crisis and since that time additional supply and transportation flexibility has developed.
- (2) A war resolved quickly by today's or tomorrow's super-weapons. In this case, inventories, not current new supplies, would be critical and a crude pipe line would not play much of a part.
- (3) A relatively long war similar to the last one where control of the seas was won and huge oil requirements developed in support of overseas military operations. In this case, the availability of foreign sources of production, nearer the theatres of war and already developed in support of peacetime markets, proved invaluable.



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Under these circumstances, a Canadian pipe line to Montreal to prove of strategic value should be in standby status during peace.

- (4) A long war in which very little control of the seas is securing. In this case, the huge oil requirements to fight an aggressive war would be missing, and it is quite likely that North America could prove self-contained.

The extent to which a Montreal pipe line might prove of assistance in the event of actual war will, therefore, vary with the conditions. On the other hand, it is very important to consider the political aspects of war prevention. A maximum of international trade is generally recognized as most desirable in this respect. It is difficult to assess what political damage and contributions to tensions might flow from further restrictions on North American purchases of oil but this is a factor which belongs in any overall study of national security.

It is perhaps of interest to note that the United States Office of Defence Mobilization within the past 10 days refused to grant certificates of essentiality to two huge pipe lines, one to the east coast and one to the west coast on the grounds that "they are not of sufficient essentiality to the nation's mobilization needs to warrant the obligation or use of Government funds."



That concludes our presentation.

THE CHAIRMAN: Thank you very much,
Mr. White.

Mr. Pattillo?

MR. PATTILLO: Mr. White, I wonder if
we might see whether we can agree on certain
facts which would be a basis for some questions
which I wish to ask you.

First of all, as I understand what you
either say or infer regarding the producing areas
of Canada, the normal law of supply and demand
is suspended and has nothing whatever to do with
the rate of development.

MR. WHITE: We can go right along
part of the way with you, but we think it is an
over-statement; it has been modified.



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MR. PATTILLO: When you say it is an over-statement, would you please explain to me - from my understanding of what you say, it seems to me that the rate of development is dependent upon three things: The requirements in the leases, the investment that one has made, and therefore the desire to get in on his share of the production that is going to market, or the desire of a company to continue to hold its share of production going to market and prevent being backed out. Are not those the three fundamental things?

MR. WHITE: That is correct, Mr. Pattillo.

MR. PATTILLO: And whether or not there is an overall market available for the present production has nothing whatever to do with the matter at all.

MR. WHITE: It has very little to do with the matter at all, Mr. Pattillo. Again we are talking about matters of degree. Now, as far as the degree we can now see, I would follow right along with you, and that also applies to degree in further capacity that the old industry, as built historically, has felt necessary to preserve.

MR. PATTILLO: And would you agree that probably the really only incentive you have today in the west for continued exploration is the company's desire to preclude itself being backed



out?

MR. WHITE: I would think that is a generality I can accept, Mr. Pattillo. Of course, the oil business is a funny business, as you know; they deal in future, they lay down what is to be needed, and investment is a characteristic of the industry. Now, we are talking about matters of degree in Western Canada.

MR. PATTILLO: Do I understand you to say that, as a result of this policy, unless you had prorationing to market demand you would have a chaotic condition as to pricing if you allow the law of supply and demand to apply?

MR. WHITE: My advisor was telling me that not only would you have a chaotic price situation but you would have complete confusion of equities, conservation, and really quite an interesting situation in which no man knew where his investment stood.

MR. PATTILLO: So, so far as the producing end of the oil business in Canada is concerned, as I understand it, you say that to ensure these equities, both as to price and as to share of the market, you must have Government regulation?

MR. WHITE: You might add one other thing to that - conservation, which means the production we are referring to, and, as far as I can see, there is no other way of doing it than



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Government intervention.

MR. PATTILLO: So that phase of the oil industry at least must be fully controlled.

MR. WHITE: I see no other alternative. Just a minute now. The answer is yes, and for a number of reasons, including it has to be done that way or the Combines Act would be attracted to the operations of the people in the area.

MR. PATTILLO: Now, let's move to the market. As I understand it, you still think, notwithstanding the recent sad developments since we were in Calgary, the potential markets, the best potential markets for Canadian crude are the Far West in the United States and Middle West in the United States and the Ontario market.

MR. WHITE: We do.

MR. PATTILLO: I think you would agree with me that, provided there is no Government regulation of intervention, when and if Canadian crude gets into any of those markets depends upon the economics of the refiners in the markets.

MR. WHITE: Yes.

MR. PATTILLO: And am I correct in thinking that recent developments have indicated that, by rate of exchange and other methods, Venezuelan crude and Indonesian crude are getting into markets in the areas in the Mid-west in the United States and the Far West in the United States



that they haven't done before?

MR. WHITE: I think your mechanism is wrong. Venezuelan crude we know is moving up the Mississippi, and Indonesian crude has been moving up the West coast for some time - not new.

MR. PATTILLO: And as long as the Western World is confronted with a surplus of oil over demand, without Government intervention or regulation, isn't that trend likely to increase rather than decrease?

MR. WHITE: I don't think that is entirely true, Mr. Pattillo. You can't conclude at any one time that we are in a very different situation; that nothing can save us. I don't believe that. I don't believe that for several reasons. Having been a long time in the oil business, things change rapidly. You are looking at a very depressed time now, both from a consumption standpoint, both in Canada and the United States. That is, of course, one of the difficult things the Commission has to consider. I can understand that you have come to the conclusion you have just put to me, but I frankly don't agree with you.

MR. PATTILLO: Will you agree with me in this, that, as long as Mid-east oil is available to the western hemisphere and the western democracies, it would appear that there is always going to be a



surplus of oil over market requirements?

MR. WHITE: In varying degrees, that is correct, but again, going back into history, with the exception of two or three particular periods, there has always been a surplus, and the surplus has expanded from time to time, but that situation is not unusual.

MR. PATTILLO: Now, would you agree with me that in the present circumstances, if it were not for the deficiency agreements relating to the Trans Mountain pipe line, you might even have foreign oil coming into Vancouver?

MR. WHITE: You might, anyway, but you are not having it, and I don't think it has the controlling influences on the Vancouver refiners.

MR. PATTILLO: You don't think they have any commercial deterrent there?

MR. WHITE: No.

MR. PATTILLO: Now, let me ask you this question, Mr. White. You recall that after your company gave evidence in Calgary we called a number of companies that were producers in Alberta who had refineries either in the Middle west or Far west in the United States to see whether or not they could be persuaded to take any share of the Canadian production. You know the results of that enquiry. Now, since that time, have you obtained any factual information which would lead



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you to believe that the prospects of putting Canadian crude into the Far west United States or the Mid-west United States are going to improve?

MR. WHITE: No, the answer to that is obviously in the negative. We have not, but I don't think all efforts in that connection have been exhausted by any means, Mr. Pattillo. We have no concrete evidence in the sense of your question.



MR. PATTILLO: That there be voluntary effort by any members of the industry. Am I correct in thinking that at the present time there is some unused capacity in the refineries in Ontario and that unused capacity increases in October when Cities Service refinery comes into operation?

MR. WHITE: That is part of the increase in capacity. There are some bottleneck removal programs that may come into effect. Yes, there is an increase capacity in the Ontario territory.

MR. PATTILLO: And do you know of anything that has been done to get Canadian crude into that unused capacity at the expense of foreign crude going into Montreal?

MR. WHITE: We mentioned, I think, in the earlier discussions of means to encourage use of Canadian crude in the Canadian markets. It was most difficult for the industry to get together without Government sponsorship or chairmanship. In fact, we couldn't do it. I think notice has been taken of that by the Commission. Speaking from our own company's standpoint, we have backed out in effect a million barrels of import through the taking on of processing contracts that would otherwise be an importing job. I know that. I know very little else because obviously we have not been talking about it.

MR. FRAWLEY: Is that gasoline, Mr. White?



MR. WHITE: Heating oil.

MR. PATTILLO: Now then, as I understand your views the Montreal market in your opinion is not an economic market for Canadian crude.

MR. WHITE: Well, I wish I could think it was. It is a nice big market. If it were we would have been promoting it a long time ago. We do not think it economic.

MR. PATTILLO: So that in your view, if the Canadian crude is going to go to the Montreal market, it can only go there as a result of government intervention and regulation.

MR. WHITE: I think that is our conclusion.

MR. PATTILLO: Can you tell me from your experience with pipelines if a pipeline such as Interprovincial is running through a State in the United States whether it is liable to taxes in that State?

MR. WHITE: I guess we have direct testimony back here that it is liable to taxes within the jurisdiction it operates. Similarly, it would be in Canada.

MR. PATTILLO: In each of the provinces.

MR. WHITE: In each of the provinces.

MR. PATTILLO: Now, in connection with this pipeline to Montreal and your proposal that the Government of Canada approach the Government of the United States and seek to endeavour by treaty



to make arrangements for Canadian crude entering the United States -- do you agree with me that if the United States Government agreed with the present import restrictions imposed by it on oil should not apply to Canada and that would permit Canadian crude to go into the United States; so that Venezuelan oil would continue to go into Montreal, do you agree that the result of that really would be a government-sponsored interchange of Canadian crude with Venezuelan crude? Do you agree that in effect by taking Canadian crude into the United States the United States Government would be allowing a larger percentage of Venezuelan crude to go in than the import quota permitted?

MR. WHITE: It is an interesting exercise in mathematics but I think you are quite correct. The only difference that might have a bearing on the subject is there has been considerable evidence given that concession ownership of crude, a hundred per cent ownership of crude, does give a greater competitive position than oil produced under pro rationing in Texas or anywhere else. That being the case should the mechanism you describe exist the American producer in the Pacific, or in any part of the States, is facing competition from the same kind of crude in the sense of it being produced under pro rationing as he is producing himself. His competitive position has been improved: The only



element that bears on it is that of geography, which is usually a normal factor.

MR. PATTILLO: The reason I asked you that question is it has been suggested to me that it is not very realistic to expect the United States Government to enter into any treaty arrangement whereby Canadian crude would go into the United States until such time as the two countries were operating on a common uniform policy regarding the importation of foreign crude -- foreign to the Hemisphere. Have you heard such?

MR. WHITE: Did you ask a question at the end of that sentence? I didn't get it.

MR. PATTILLO: Have you heard such a statement as the one that was made to me?

MR. WHITE: I think you are the one that introduced the treaty concept. I frankly don't know what mechanism would be resorted to to accomplish this. You are creeping into the common trade area pretty fast. Perhaps that is realistic. Perhaps that is a realistic way to look at the United States and Canada. It may be not a common tariff --

MR. PATTILLO: Well, in other words, supposing the United States said, "All right, we will treat the continent as a whole". In effect in your last summation in times of War emergency that is the way you look at it. Supposing the United States said, "We will treat the continent



as a whole, not only in times of War but in times of peace." Therefore it would be necessary for Canada to put on import quotas and duties to bring it into line with the United States. Having done that then would the economics of the Montreal market still be as unrealistic as you presently think they are.

MR. WHITE: Let me start off. I have been listening here and maybe I have lost track of the question. The first one is a proposition, as I understand it: should this union, in effect, of ideas that might exist cause pressure for quotas or import duties in the Montreal market; and if so, would that change our views on the economics?

MR. PATTILLO: Yes?

MR. WHITE: Duty is a matter of definition. If you take 10 1/2 cents the answer is no. A quota is something quite different. That is implicit in the original Montreal pipeline proposal. I don't think that would change ideas and economics, if that is the basis of the question.

MR. PATTILLO: The reason I thought it might be a bit different is this: as I understand it from your brief the pricing system that used to prevail in the world's markets of oil has been changing because of the quota system now enforced in the United States and that accordingly the prices prevailing in the United States are not bearing the same



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relation to world prices as they used to do. Now, if that is so, and you had the same quota system in Canada then would not the old idea of having Sarnia prices based upon Mid-West be a controlling factor? Would not Canadian oil into Montreal become an economic possibility?



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MR. WHITE: Under those circumstances of a complete installation you might be quite correct, Mr. Pattillo, in your analysis. Actually the quota system has tended to insulate the United States crude oil price structure. That, of course, has been qualified by the ten cent excise duty on crude imports into the United States. You might argue that the price of oil in the United States is too high in relation to world-wide prices. The economists might agree with that. But, getting back to the original premise, if you isolate or insulate your market you can make it economic under certain ground rules.

MR. PATTILLO: I am searching for another way of avoiding the multiplicity of controls that you see -- if you merely go to Montreal, Canada, and have the import quota that you are talking about. I am wondering if those controls could be lessened very greatly if the Canadian Government decided, as a matter of policy, that they would adopt, regardless of the merits of them, exactly the same rules that the United States Government has enforced.

MR. WHITE: By "rules" you are talking about a voluntary quota, aren't you?

MR. PATTILLO: Yes.

MR. WHITE: And there are several differences. That could be summed up as follows.



In the United States the voluntary quota represents an effort to preserve import flexibility against the anticipated change in future conditions when further imports may become desirable. No permanent commitment such as financing of major pipe lines by the industry is involved in these short term quotas. In the case of Canada it is proposed through quotas to eliminate rather than preserve the flexibility of crude source into the indefinite future at the expense of a permanent commitment in the form of some \$400,000,000.00 in a pipe line. There is quite a different situation.

MR. PATTILLO: Can we get around that? Supposing the Canadian Government in the interests of the national economy and the national sufficiency in time of emergencies was prepared itself to build this pipe line and they permitted the flexibility that you say exists in the United States, would the same problems that you put forward exist so far as taking Canadian crude^{to Montreal}/oil is concerned?

MR. WHITE: You are assuming a Government owned pipe line and an impediment to the importation of materials to Montreal.

MR. PATTILLO: A voluntary system such as they have in the United States, operating exactly side by side with it. If theirs^s went off, ours went off. If theirs increased, ours



increased.

MR. WHITE: Let us define, first of all, that voluntary system. That is no more voluntary - - it is in name, but it is not in actuality. Therefore you have ^a/mandatory system that is not a mandatory system.

MR. PATTILLO: Let us not talk about it as voluntary, then. Let us talk about it as flexible, which is the word you used. What about a flexible system - - if they had a flexible system as opposed to the inflexible one they have here.

MR. WHITE: I don't think it is important anyway. What you say is that there must be a quota fixed by the Government. Why must there be a quota? Simply because something from outside is more attractive than something from inside. Therefore you have a control beginning at that point, and again we get into the difficulty, with the Government's constant preoccupation with the consumer's well-being, at what point does the Government take the responsibility of saying that he is being overcharged.

MR. PATTILLO: What I have in mind, let me try to state it this way. You say the Montreal market is not economic for Canadian oil. All right. The proper markets, the economic markets, for Canadian oil are the Pacific Northwest and the Mid-



west and the Ontario market. At present there does not seem to be very much opportunity of getting two of those markets, and that leaves us with the Ontario market. Now, the Government of Alberta and some of the producers out there say, "That is not good enough. We cannot keep on. We are not like the sparrow in Cape Breton; we cannot live on hope. We have to get a market." Now you say, "All right, then the Canadian Government should put the pressure on the United States Government to allow Canadian crude to go into the United States". I am suggesting to you that it is not very realistic to expect the United States Government to do that as long as the Canadian approach to foreign imports differs from the United States approach, because what the United States producer will say, is, "You are in effect, by taking Canadian crude in here, you are in effect increasing the quota for the countries that are putting their oil into Montreal, and that is a very big point against it".

MR. WHITE: That is not in the future. They have been saying that for some time. A. P. B. have been very hopeful about back-door importation. You are dealing with a situation that has been going on for some time. It is not a newly created leak in the dike, if you want to call it that. There are certain real advantages to the



United States in allowing or preserving this outlet because, as has been brought out before, a quarter million barrels immediately back out of Canada would be additional pressure on the United States.

MR. PATTILLO: What I was suggesting was that perhaps from the standpoint of the Canadian economy, the saving of foreign exchange and the making of Canada self-sufficient in times of emergency, that if you did say, "All right, we will match our economy in oil with that of the United States", that the result would be that without any controls other than those the continent would become one oil community - - you could put Canadian oil into Montreal and your price structure would all be governed as it used to be by the price of milk in Texas.

MR. WHITE: I have great difficulty in following you, in this sense. You have combined about six different debatable concepts in one question, and I do not know where to start.

MR. PATTILLO: I appreciate that.

MR. WHITE: I would like to go back to one question that you did not quite finish up, about the Government's pipe line. If any Government pipe line is built, which can be used when economic and idle when not economic, that would be wonderful. The only thing you would



have tied up would be \$27,000,000.00 worth of crude oil in the line, which somebody would have to supply.

MR. PATTILLO: Yes, but, as an approach to it, it could be something like the approach to building the railways. We have lines of railways today that exist in this country that are not economic but are being maintained.

MR. WHITE: I do not know about that.

MR. FRAWLEY: Oh, yes, you do.

MR. PATTILLO: Mr. Frawley speaks very feelingly.

MR. WHITE: If you like to go back to the complicated question about breaking up the pieces, I would like to do something about it, but I am a little confused about it.

MR. PATTILLO: Perhaps I could take it by stages. The Canadian producer in Alberta is looking for a greater market for his oil.

MR. WHITE: He is looking for one.

MR. PATTILLO: The Province of Alberta is looking for one, that is right?

MR. WHITE: Correct.



MR. PATTILLO: It doesn't seem likely that there is any appreciable market in the United States for Canadian crude in the next few years unless there is some government intervention by the United States Government?

MR. WHITE: Or the Canadian Government. We can deal with that later. But we would agree, with limitations. But I won't argue about it now.

MR. PATTILLO: Now, then, I suggest to you that it is not very realistic to expect the United States Government to do something which would permit Canadian crude to go into the United States regardless of quota to the detriment of the U. S. producer as long as the U. S. producer has the present argument that such an action with Venezuelan crude and Middle East crude going into Montreal constitutes a breaking of the U. S. quota for the benefit of those countries rather than for the benefit of Canada?

MR. WHITE: I wouldn't put it that way at all. What you just started out with was with Canadian oil coming in under quotas.

I put it another way that if the United States producer has that volume of Canadian oil as an economic tributary in certain areas of the States, and it is taken into account prior to determination of the quota, the Canadian oil backs out the foreign oil which is competitive; so that



to the United States producer the same total volume of imports would be maintained, but the quota would be smaller for distribution among other foreign oils than Canadian.

MR. PATTILLO: That doesn't make any real appreciable difference?

MR. WHITE: It would make a tremendous difference.

MR. PATTILLO: Would it?

MR. WHITE: Yes.

MR. PATTILLO: Well, perhaps, I am not understanding just how you apply that.

MR. WHITE: Let us say that they have a determined million-barrel quota requirement and, for the purpose of this illustration, the Canadian producer has 100,000 barrels -- which is the economic tributary -- if they have determined the new quota and have accepted the 100,000 barrels then the remaining quota would be 900,000 barrels and there would be no change in the amount of oil imported. There would be a change in the country of origin.

MR. PATTILLO: I see. You take it off the amount which you are allowed in the aggregate. Has that, do you maintain, any significance? I was adding it to the quota. So you think that that would be of significant value. But isn't that the very thing that your company and other



Canadian companies have been trying to convince the United States independent producer of for some time, without any effect?

MR. WHITE: Well, we have been at various independent producers' conferences, and Mr. Cogan has made our position clear, but they are not the ones that can decide. The independent producer is not going to be the person to decide, but he may have some bearing on the making of the decision.

Nevertheless, I admit that there has been no indication that the independent producer is proposing to take the suggestion I have made to you. From the point of view of many of them being interested up here for sentimental reasons I don't think you would have too much objection from them.

MR. PATTILLO: Well, let me put this to you: Supposing the Canadian Government did go to the United States Government and ask for an arrangement whereby Canadian crude could enter the United States and that that quota would be determined in the manner you have suggested, and they were then confronted with the answer that, for political reasons, "We can't do that because we will be confronted . . ." -- with the argument that I put -- then, if the Canadian Government decided, that outlet being out, that its policy would be to make an oil policy identical at all times with the United States, under such circumstances



as that, firstly, if the Canadian Government did not build the pipe line but looked to private industry to do it, would you consider the Montreal market any more economic than you have said it is in your statements here?

MR. WHITE: Would you please repeat that? At least, repeat the premise in the question. Unfortunately, I am trying . . .

MR. PATTILLO: My premise was that if the United States Government told the Canadian Government that they could do nothing, for political reasons, because of the pressure being put on by people in the United States, and then the Canadian Government decides, of its own volition, and without any act on the part of the United States, that it would make its oil policy exactly the same at all times with United States Government oil policy and first look to private interests to build the pipe line to Montreal, would the Montreal market, where you had hemisphere policy on oil, be any more economic than you say it is in your statement which we have had today?

MR. WHITE: It would be exactly the same, with the exception of the $10\frac{1}{2}$ -cent duty which, I assume, would be added to the structure with the so-called voluntary, not mandatory, control; and on the one hand Canada has to build the \$400,000,000 pipe line, you are saying, to do



it. At the moment they are importing roughly 40 per cent of their requirements. On the other hand, the United States, importing 10 per cent of its requirements, without any requirement to build any facility of such a nature, endeavours to protect its flexibility down the road.

The two propositions are just not the same. If you are asking me if we would be favourably disposed to take on guarantees and so on . . .

MR. PATTILLO: Yes.

MR. WHITE: . . . I think the answer has to be No.

MR. PATTILLO: So that to make the Montreal market economic for Canadian crude it is your view that you must not only have the continent approach to the oil but you would have to have the Canadian Government building the pipe line and asking for no guarantees from industry?

MR. WHITE: Well, frankly, Mr. Pattillo, those conditions don't appeal to me as an economic situation. If they are imposed we could not sell oil in Montreal today; we couldn't do it. But beyond that I don't see what more I can add to you.

MR. PATTILLO: Well, there is one other question I have got to ask you: Supposing the Government did say to the oil industry: "We are going to have Canadian crude in Montreal. We are



going to impose quotas. We propose to make them identical to those in the United States. Now, we will give you the option. We will build the pipe line, but we will give you the opportunity to build it if you want to." What do you think the private industry's reaction to that would be?

MR. WHITE: I think it would have to know a lot more about it. It would have to have careful exploration. This doesn't appeal to the type of industry you have now, I am afraid.

In the ultimate, in many cases, you do things you don't want to do, but you want to know all the conditions before you can answer the question.

MR. PATTILLO: In other words, you can't say right off: The answer is No; you would build the line?

MR. WHITE: No.

Mr. Pattillo, might I retract a little statement in connection with the quota system as applied in the States? Mr. Cogan draws to my attention that this is an effort to maintain the status quo; that is, that United States crude supplies 90 per cent of the U. S. market. In our case the action of quotas would be in either one of two ways. If you followed the principle of status quo in that case the 10 per cent of the Canadian market would be covered by imported crude



and the balance by domestic crude.

I am not just sure whether that adds any light to the situation or not. Making it the status quo you wouldn't do anything. You would have the trade to Montreal and Halifax and you would have the 10 per cent in the United States.

MR. PATTILLO: I have one other question I would like to ask, Mr. White. I did gather, from what your company has expressed in Calgary and here this morning, and from the study you have given to this problem, that so far as your company is concerned unless there was some form of government regulation or intervention you don't see, at any time in the foreseeable future, Canadian crude going into Montreal as an economic proposition?

MR. WHITE: It is rather too big a risk, I think. "Any time in the foreseeable future" is a long time, but there is a lot of oil around. No, I think that statement is correct.

MR. PATTILLO: Those are all the questions I have to ask.

THE CHAIRMAN: Thank you, Mr. Pattillo.

It is almost half-past twelve. I think we will adjourn now and reassemble at two-fifteen this afternoon.

---Thereupon the hearing adjourned until 2.15 p.m.



---On resuming at 2.15 p.m.

THE CHAIRMAN: The Commission will now resume its hearing. Mr. Frawley?

MR. FRAWLEY: Thank you, Mr. Chairman.

Mr. White, I don't necessarily anticipate any acrimony, but before there is the slightest possibility of that arising, I would like to ask you two or three questions which I think you can answer in the calmest possible voice, both of the questioner and the answerer.

Would you look at 1-4, and there, at the bottom of the page, you say under (5) (c):

"The so-called integrated companies who have a large share of shut-in production are also the ones carrying the main burden of primary exploration which opens up new oil areas". You will, of course, agree with me that the independents have drilled a large number of exploratory wells.

MR. WHITE: No question about that, Mr. Frawley.

MR. FRAWLEY: Now, would you agree, though, that if the shut-in condition continues the majors will be the only ones left?

MR. WHITE: I wouldn't agree with you, no.

MR. FRAWLEY: There isn't very much question that the majors have greater financial resources than the average independent.

MR. WHITE: In relation to their demands,



I am not sure, but let's say, for the sake of argument, that that is quite correct; it is a generally-accepted theory.

MR. FRAWLEY: Let me put this to you. You have yourself made the frank admission, and I admire you for making it, that in the Golden Spike pool you have a producibility of 45,000 barrels per day, and you are now producing at 340 barrels a day.

MR. WHITE: In May and June, yes.

MR. FRAWLEY: What is it for July?

MR. WHITE: I don't know.

MR. PATTILLO: 3,051.

MR. WHITE: That is an improvement.

MR. FRAWLEY: It has gone to 2,000.

MR. WHITE: To 3,000, Mr. Pattillo tells me.

MR. FRAWLEY: But Imperial has weathered that pretty well.

MR. WHITE: Well, if you mean are we going broke, no. I am not happy about shut-in production anymore than you are.

MR. FRAWLEY: How long do you think my friends in Calgary can weather that sort of thing where their potential is 45,000 barrels per day and Mr. McKinnon's Board only lets them sell 2,000.

MR. WHITE: If you are going to make a hypothetical case, I don't know their position any more than any other oil company's position; but, generally speaking, the way to meet that situation



is to cut out your exploration expenditures and just to carry on.

MR. FRAWLEY: My question stems from this rather remarkable situation, that each and every one of the major companies have said no pipeline to Montreal, and the independents are behind the idea of a pipeline to Montreal.

MR. WHITE: No, I disagree with your categories there. You said "major". First of all, I don't know what a "major" is. The companies will have been asked to guarantee the throughput of the pipeline. The others -- you know them, Mobile, Pan-American -- I don't know what their position is.

MR. FRAWLEY: All I am suggesting to you is that the continued shut-back is a matter of extreme urgency to the independents, but apparently it is not a matter of extreme urgency to the --

MR. WHITE: I would say a matter of extreme concern to both. I wouldn't say urgency, but it is of great importance to all the industry.

MR. FRAWLEY: As far as refining in Montreal is concerned you are satisfied with the situation short of going to Montreal.

MR. WHITE: We are not satisfied with it. We are not happy to accept the position which we don't think is competitive. A pipeline will not lay crude in Montreal competitive with the foreign crude at Montreal.



MR. PATTILLO: I would like to run over with you for a few minutes what seems to be a factual picture. I just want to see to what extent the Alberta oil industry is fenced in.

Now, let's go to the Puget Sound. In the Puget Sound one refinery, Shell Oil, has said no Alberta crude after 1958; is that right?

MR. WHITE: I don't think that is right. The only statements I ever heard was no more Alberta crude in July.

MR. FRAWLEY: I am sorry, I am not hearing you too well.

MR. WHITE: On the question of whether I had ever heard the statement you made reference to, the only knowledge I have of Shell's operations is that they have eliminated the taking of Alberta crude in July.

MR. FRAWLEY: We may ask Mr. McKinnon what they said. I understand they are going to bring British Borneo crude into Puget Sound.

MR. WHITE: That may be true.

MR. FRAWLEY: Assume with me that is what is happening.

MR. WHITE: Well, you have made the proposition. Go ahead and develop it.

MR. FRAWLEY: And I put it to you that General Petroleums, a subsidiary of Sun Oil, is going to take in 1959 from 12 to 15,000 barrels a day, on



an optimistic forecast.

MR. WHITE: I haven't any information on that.

MR. FRAWLEY: Have you looked at that statement?

MR. WHITE: I have looked at the statement and checked the totals for the year we have, and I agree, except with his appraisal of the export market.

MR. FRAWLEY: That the Texas refinery is going to take from 6 to 8,000 barrels per day in the Puget Sound.

MR. WHITE: I accept the testimony given in Calgary in which they said 8,000 barrels.

MR. FRAWLEY: Are we sending no supply and no prospect of sending supply to the other operators, Union Oil and Richfield. That is the Puget Sound situation.

MR. WHITE: Richfield and Union Oil have refineries in Puget Sound? That is news to me.

MR. FRAWLEY: I may have made a mistake. Now, the Puget Sound situation --

MR. WHITE: What is the Puget Sound situation? You have said from now on they are not going to do this and they are not going to do that. Is that the way you want to leave it? I don't agree with that. Just leave out the words "from now on" and I will agree with you.



MR. FRAWLEY: What do you say?

MR. WHITE: I am putting a time limit on it.

MR. FRAWLEY: What is the time limit?

MR. WHITE: I don't know. It is not "from now on out".

MR. FRAWLEY: Of course, if you don't agree that Alberta has lost Puget Sound except for the 8,000 barrels for Texas and twelve to fifteen thousand for General Petroleum I might as well stop my cross-examination right now. We are not getting anywhere.

MR. WHITE: I am sorry. We have been together before and perhaps know one another well enough that we take liberties. I was questioning you saying "now on out". The situation as you have described it today is correct.

MR. FRAWLEY: When we move to the mid-west we were told this morning that Venezuelan crude was moving up the Mississippi. Do you know whether it is moving up in so far as the refineries in the Minneapolis-St. Paul area are concerned?

MR. WHITE: Frankly I don't. I have heard there is pressure from Venezuelan crude moving up the river.

MR. FRAWLEY: I would like to read an article from The Oil and Gas Journal. It is stated that International Refineries is working



out a deal under which Atlantic Refining will take International's Venezuelan crude at Philadelphia in exchange for Williston Basin crude delivered by Atlantic to International plant at Wrenshal, Minnesota.

MR. WHITE: That sounds like a normal commercial operation.

MR. FRAWLEY: There is some western Canadian crude going into that area?

MR. WHITE: There has been to International Refineries.

MR. FRAWLEY: If there is a further reduction experienced in that Minneapolis-St. Paul-Wrenshal area that would be a further setback in western Canadian crude?

MR. WHITE: Undoubtedly.

MR. FRAWLEY: Turning to the United States voluntary restriction procedure, they are now, after some time, applying restrictions on products as well as crude imports, on products as well as crude?

MR. WHITE: I am advised they are talking about it. I am not aware they have actually done it.

MR. FRAWLEY: All indications point to a tightening up of restrictions rather than any relaxing of restrictions.

MR. WHITE: Yes, I think that is fair.



MR. FRAWLEY: Now in that situation what you suggest is that we should be satisfied with saturating the Ontario market. Is that correct?

MR. WHITE: I don't think that follows. We get back to the argument about "from here on out". I think there is more to be done in the export markets in the west.

MR. FRAWLEY: You think there are some further American markets that I have not indicated?

MR. WHITE: In the areas you have indicated I don't think the present level of consumption is indicative of how far down the road.

MR. FRAWLEY: How far down the road is material consideration when you are thinking of independents as distinguished from majors being able to weather the crisis?

MR. WHITE: We are not too happy about it. Please deal us in on that.

MR. FRAWLEY: Now, you have some figures that I would like to ask you about on this question. At some place in the brief you are talking about the Puget Sound market. It is III - 6. Now I would like to ask you, Mr. White, looking particularly at 1959 and 1960 and 1961 forecasts, you forecast for Puget Sound in 1959, 65,000 barrels a day. In 1960 it is 95,000 barrels a day and 1961, 1110,000 barrels a day.

Undoubtedly you would have working papers



behind the forecasts. I would like you to file them with the Commission.

MR. WHITE: I don't think there is any point in talking about working papers. Those are based on assumption. Either you get into Puget Sound or you don't. We think you will. If you do those are the figures.

MR. FRAWLEY: My question is that 65,000 barrels per day for 1959 to Puget Sound of Alberta crude was not a figure you pulled out of the hat.

MR. WHITE: No. That is based on an appraisal of the oil industry refineries plus the one at Tacoma.

MR. FRAWLEY: What I would like you to do is give me the makeup of the 65,000, how you related it to the three or four refineries concerned. If you have them you can just put them into the record, please.

MR. WHITE: Let us put it in the record. Twenty-five thousand barrels a day for General Petroleum, 30,000 for Shell, 10,000 for Texas, and that totals 65,000.

MR. FRAWLEY: What did you say about Shell?

MR. WHITE: Shell was taking 30,000 barrels in this estimate. That is out of the total of the balance in the area. In 1959 out of 125,000 barrels' capacity we were estimating



roughly 50 per cent will be Canadian crude.

MR. FRAWLEY: That will be going to all the refineries by the Texas Company?

MR. WHITE: It is in the record. I don't think too much meaning can be taken whether we assign "X" to Texas or "Y" to Shell. It totals 50 per cent.

MR. FRAWLEY: Why was anything assigned to Shell?

MR. WHITE: I gave the figures to the record -- 25,000 barrels to General Petroleum, 30,000 to Shell and 10,000 to Texas.

MR. FRAWLEY: Now, then, give me some breakdown for the 95,000 in 1960.

MR. WHITE: Thirty-five thousand to General Petroleum.

MR. FRAWLEY: And will you give me the same breakdown for 110,000 barrels per day in 1961?

MR. WHITE: Forty thousand for General Petroleum, 45,000 Shell, 25,000 Texas.

MR. FRAWLEY: Will you move to the mid-west and tell me how you arrive at the 75,000 barrels per day going into the mid-west? Where is it going to in 1959?

MR. WHITE: Once again this is percentage gross. This is a bit more complicated because we have two kinds of crude, light crude and medium crude oil. Do you want it by companies?



MR. FRAWLEY: I told you a few minutes ago if it is more convenient you may prepare a short memorandum and file it. It would take less time than putting it on the record now.

MR. WHITE: We will take less time.

MR. FRAWLEY: Now, I would like to know what you think about the recommendations which the Premier of Alberta made to this Commission on the 16th day of May last in Calgary. There are not very many of them. I will put them to you one by one and see whether you agree.

"Having regard to all the factors involved I would urge that your Commission, at the earliest possible date, advise the Prime Minister and the Cabinet of the serious marketing problem confronting Canada's oil industry and recommend immediate action along the following lines:

"1. That the Prime Minister convene a meeting with the senior officials of the refining, importing, transporting and marketing companies involved in order to --

"(a) advise them of the urgent need for increased use of Canadian crude oil and for the reduction of imports of crude oil and also for the freezing of refined product imports to present levels."

What do you think about that?



MR. WHITE: I would agree with the first part of the recommendation.

MR. FRAWLEY: What part don't you agree with?

MR. WHITE: The last two. It is impossible to freeze the import levels.

MR. FRAWLEY: "(b) request industry
"to take all necessary action to accomplish
"these objectives and also to advise industry
"that certain specific objectives must be
"fulfilled in accordance with an estab-
"lished time schedule."

Do you agree with that?

MR. WHITE: I agree with that. Go on.

MR. FRAWLEY: "(c) advise industry
"that failing a satisfactory solution to
"this problem within the prescribed time,
"it is the intention of the Government of
"Canada to impose import quotas on crude
"oil and refined products to the extent
"necessary to make economically feasible
"the construction and operation of a pipe
"line to transport Canadian crude oil from
"Western Canada to the Montreal refining
"area."

MR. WHITE: It is hard to pass comment on that. Ultimately you have to lock yourself in. I would prefer to leave that to the Prime Minister.



In other words, what I am saying is that eventually you may have to do the things you do not think are sound and proper. That is a matter for government decision.

MR. FRAWLEY: I am reading these things to you and I just want to see to what extent there is any great gulf between the views of Imperial Oil and the views of the Alberta Government. That is why I am putting these things to you. No. 2 is: "That the Prime Minister request an appropriate government agency to proceed immediately to make a thorough analysis of the best ways and means of instituting import quotas on crude oil and refined products into Canada."

MR. WHITE: That is strictly a matter of mechanics, and I could not argue with that at all.

MR. FRAWLEY: You take no exception to this suggestion of the Premier's?

MR. WHITE: If they have come to the conclusion, that is a very necessary follow-up step.

MR. FRAWLEY: "3. That the Prime Minister re-open and continue high level discussions with the United States government with the view of re-establishing and expanding the markets for Canadian produced crude oil in the Pacific North-west and North Central areas of the United States."

MR. WHITE: That is easy, I agree with that.



MR. FRAWLEY: "Talks with regard to this problem already have taken place but unfortunately little has been accomplished. I still believe that such negotiations eventually can be successful providing a stronger approach is taken by the Canadian representatives and providing the discussions are conducted at cabinet level. However, we must not anticipate any major adjustments in the next few years."

What is your comment on that?

MR. WHITE: I have no particular comment on that.

MR. FRAWLEY: "4. That the Prime Minister designate a member of his Cabinet to keep in close touch with the industry, the provincial governments and the United States government to insure 'follow through' and the most rapid progress possible."

MR. WHITE: I have no comment on that.

MR. FRAWLEY: Do you disagree with that?

MR. WHITE: No.

MR. FRAWLEY: I put it to you that what the Alberta Government seeks is, first, a market



for our oil somewhere and that, having been boxed in in the Puget Sound and having apparently a shrinking outlet in the Mid-West, if these conditions continue we have no alternative but to seek a market even though it means displacing foreign crude in Montreal. What is your comment on that?

MR. WHITE: There are two key phrases -- and I do not like to quibble but these sentences get pretty long -- and one of them is "if it continues", is that correct?

MR. FRAWLEY: Yes.

MR. WHITE: You said, "even if it displaces foreign oil"?

MR. FRAWLEY: That is a bit of comment -- eliminate that.

MR. WHITE: That is a comment. We have no interest in keeping foreign oil in Montreal.

MR. FRAWLEY: I said that because it seems to me to be very wrong. I said, even if we do this thing that is so distasteful to you.

MR. WHITE: That was not only, not distasteful, we have no interest in keeping foreign oil as such in Montreal.

MR. FRAWLEY: You have not an interest as such in keeping foreign oil in Montreal. Then I am bound to ask you a question there, Mr. White, however little I like to ask it. I want you to understand that I dislike it, but I asked it in



Calgary and I will ask you here. The foreign oil you are now bringing into Montreal that we are asking you to displace is oil dispatched by an affiliate company, the Creole Petroleum Corporation in Venezuela?

MR. WHITE: Most of it is. We buy a little Socony. I think you have heard about that.

MR. FRAWLEY: I have. That was a remarkable exchange you entered into.

MR. WHITE: It was remarkable and it worked out very well.

MR. FRAWLEY: But the great bulk of it comes from the Creole Company, the Company that I called in Calgary -- which I suppose everybody accepts -- a blood brother of Imperial Oil.

MR. WHITE: I used to work for it.

MR. FRAWLEY: What kind of brother?

MR. WHITE: I used to work for it.

MR. FRAWLEY: You probably made all these contracts while you were down there.

MR. WHITE: I admire them deeply, but not to the extent of injuring my own company.

MR. FRAWLEY: Now I have got the Creole oil situation out of my system, I was wondering whether we would have to get to it, but I am glad that is done. Now, Mr. White, you speak of guaranteeing this pipeline. What do you mean when you say you are being asked to guarantee the pipeline?



MR. WHITE: Well, at various times during the hearing experts on financial matters have referred to what is necessary to get a pipeline going. The guaranteeing that was referred to is some type of undertaking that will permit particularly senior securities which will provide the bulk of the money to build a pipeline to be sold. A pipeline without the business is not worth anything. Therefore nobody will have anything to do with a pipeline unless someone will take the responsibility should it eventually not prosper. The guarantee in that case takes various forms. They are in various reports you have received. It means in our company, to take an example, assigning responsibility for a certain amount of money or a certain number of barrels that you either ship or pay for shipping. Does that answer the question?

MR. FRAWLEY: Yes. That is what you did with Interprovincial?

MR. WHITE: Yes.

MR. FRAWLEY: How much of Interprovincial do you own, Mr. White?

MR. WHITE: Exactly one-third.

MR. FRAWLEY: But you do not want to do it for this company that is being referred to as the Brown Company?

MR. WHITE: No, there is nothing in it for us except a risk without any possibility of any return--



a very real risk too.

MR. FRAWLEY: Do you quarrel with the 48.1 cents they talk about?

MR. WHITE: I do not know anything about it. It is called the Cost of Service. It is referred to in the testimony.

MR. FRAWLEY: I would like you to tell me why, when you found a surplus of oil in Alberta back in 1950 or 1951 or whenever it was, you got very busy and you did something very constructive to bring that oil into the Ontario refinery, did you not?

MR. WHITE: It was economic to do so.

MR. FRAWLEY: Why is it not economic to do it now and to bring it further when we have that further surplus and bring it into Montreal?

MR. WHITE: The bulk of the time in this hearing has been spent debating that point. The market is not there naturally. You have a competitive source of crude oil which can be and is being laid down at a lower cost than you can lay down Canadian crude. Therefore, it is not economic.

MR. FRAWLEY: But when you say that you have to keep in mind that this is owned crude that you are bringing into Montreal.

MR. WHITE: Just what do you mean by that?

MR. FRAWLEY: By the fact that, when you look at the Jersey family as a whole, this is owned



crude you are putting into Montreal.

MR. WHITE: We have wasted a lot of time telling you that we do not look upon it as part of the Jersey family. It is my minority family in our group which really governs our own thinking.

MR. FRAWLEY: You say it is absolutely of no importance whatsoever that you are putting in your affiliate's crude in Montreal?

MR. WHITE: What was the point of that question?

MR. FRAWLEY: The very point of it is to respond to your last answer. I just want to know whether it is so completely unimportant as you indicate. I put it to you that it is not unimportant.

MR. WHITE: All things being equal, we would naturally buy from the affiliate company. When all things are not equal, we do not buy from the affiliate company.

MR. FRAWLEY: You say that putting Alberta oil into Montreal can only be done if there is a system of controls, of quotas, and then the complementary controls that would have to be applied in association with those quotas?

MR. WHITE: I think we are very definite in our feeling that the original set of controls and quotas, to name one, are necessary, and we can easily eradicate and would be careful of the extension of those control-type devices from that point.

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MR. FRAWLEY: Well, let us assume, for the sake of discussion, that there would need to be a good deal of control; that if you apply the quota in the first instance to shut back the foreign oil, that would lead to other collateral control as a consequence. Is that what you don't want?

MR. WHITE: Yes, I think that is right.

MR. FRAWLEY: Now, let us take it on that basis. If we have this serious situation which some of us, at least, contend we have in Alberta, why are we frightened of taking serious measures to meet with it?

MR. WHITE: Well, it is a case of the cure being worse than the decease, Mr. Frawley; and on this point you are in judgment. In this case we think the cure is worse than the decease. You, I judge, don't feel that way because the cure doesn't bother you very much.

MR. FRAWLEY: The cure doesn't bother me? The cure is what I like. I begin to live again. I get rid of this 37 per cent that I am now suffering from.

MR. WHITE: We are down to 30 per cent.

MR. FRAWLEY: You can stand it.

MR. WHITE: Not too happily.



MR. FRAWLEY: You and Creole. Now, Mr. White, why is it that the Alberta oil industry apparently is the only industry in Canada that is not entitled to be somewhat nationalistic? Is there any reason, and if there is, will you...

MR. WHITE: I never heard of a nationalistic approach being submitted as an entitlement. You had better explain that.

MR. FRAWLEY: All right. My knowledge - and it is common knowledge - is that the textile industry is screaming to high heaven about cheap Japanese textiles taking away their market in Canada. Now, I haven't heard anybody say that these people are to be run out of the country because they talk that way - the textile manufacturer..

THE CHAIRMAN: That is not within our terms of reference. It is about the only thing, Mr. Frawley!

MR. FRAWLEY: I would like to know if Imperial Oil will live with the legitimate aspirations of the textile industry - and there is another one I want to talk to you about in a moment - but Alberta oil has to get along. Is that what you are saying to this Commission, that Alberta oil has to get along as well as it can and weather the storms of supply and demand?

MR. WHITE: I think that is what you might deduce from my testimony; but I still think



we can do a little helping of ourselves. Don't ask me why - because it would take too long - but I would like to repeat what is said on page 5 where there is a reference to asking for protection and subsidy. It might be better for this industry to avoid that, and it would be a good thing if we could.

MR. FRAWLEY: What are you directing my attention to on page 5?

MR. WHITE: I am directing your attention to the last paragraph - the last sentence:

"In an era when many are appealing to Government for protection or subsidy, I believe it is possible for the oil industry to provide the constructive example of being able to handle its own problems - complex and difficult as they may be."

Certainly when you are talking about the Alberta oil industry you might mention that the industry's production, although in terms of production capacity it is very low, I would say your production this year is going to average between 8 cents and 10 cents, looking at it at the worst. Is that not correct?

MR. FRAWLEY: I wouldn't know whether it is correct or not.

MR. WHITE: I want to know - you are talking about other industries... What other



industries in Canada are there where the effect of the recession has been to hurt as little as that?

MR. FRAWLEY: Well, I am concerned with the fact that at the moment the industry has a ratio of product to capability of 37 per cent. I must admit that is what I am concerned with.

MR. WHITE: Yes; and that is what I am concerned with, too.

MR. FRAWLEY: And you say that we should be able to give a constructive example of being able to handle our own problems. We haven't done very much about getting that done.

MR. WHITE: We have lots to do.

MR. FRAWLEY: But always short of Montreal, so far as you are concerned?

MR. WHITE: Under present conditions, yes.

MR. FRAWLEY: And you don't know how long - if you don't mind me taking one of your exceptions - you don't know how long that word "present" is going to continue?

MR. WHITE: Under present conditions.

MR. FRAWLEY: You say "under present conditions".

MR. WHITE: They will continue until somebody changes them.

MR. WHITE: They will continue until



they are changed.

Now, these restrictions in the United States that Mr. Pattillo was discussing with you and about which he put to you some questions - the Jersey company **subscribed** to these restrictions in the United States?

MR. WHITE: Wait a minute. We have to sort of break this down a little bit. Humble subscribed to it.

MR. FRAWLEY: Well, let us talk about Humble, then. Humble subscribes to them?

MR. WHITE: Yes; Humble certainly does.

MR. FRAWLEY: And they are not protesting at all?

MR. WHITE: Yes; but I had occasion to discuss it with the President of the Humble company. He subscribes to the full investigation of the industry, with the Canadian group next and the west hemisphere group next, and ...

MR. FRAWLEY: And when you had those discussions with the President of Humble did you hear anything that might be of interest to this Commission?

MR. WHITE: We were travelling.

MR. FRAWLEY: That wasn't a regular, fortnightly conference?

MR. WHITE: It was in Germany. That



is where we were.

MR. FRAWLEY: Now, outside of saturating the Montreal market you are depending on increases in the Puget Sound market and the Mid-west market which you have indicated, and on which you are going to give us the breakdown?

MR. WHITE: Well, let us get this thing straightened out. It may not be possible to avoid the Montreal market. We have said that in the early testimony, and we repeat it today. I don't think that all efforts have been expended, or used, to expand the market in the geographically normal areas where we should be, and until we are pretty sure that we can do anything about that let us put Montreal to one side. If you, or anyone else in a responsible position, can finally determine what is possible then we will have to take another look at it.

MR. FRAWLEY: What I want to know is this. Apropos of that, give me those figures again of your Puget Sound stepup in 1961 and in 1960. What is it. Have you got the page there, Mr. Cogan?

THE CHAIRMAN: Page 36.

MR. FRAWLEY: 36. Thank you, Mr. Chairman.

This is what concerns me, Mr. White. I must say that I took what you said a few minutes ago as a crumb. I understand that that is an expression which occurs some place else that we are going to



hear about. You said that you hadn't completely ruled out the possibility of Montreal, but you said that until we reach the stage when we are satisfied that nothing else will avail we mustn't think about Montreal. Is that what you are saying?

MR. WHITE: Right.



MR. FRAWLEY: All right, now, I say it roughly but you agree that it is roughly. Mr. White, do we have to wait until it reaches 110,000 barrels a day in 1961? Is that the sort of thing you have in mind?

MR. WHITE: You do not really think we can come to a decision on this.

MR. FRAWLEY: No, except I want to know what is in your mind as to how long we have to wait in exploring this alternative short of Montreal.

MR. WHITE: I do not think I would be honest if I told you how long we would have to wait.

MR. FRAWLEY: It may be for years and it may be forever?

MR. WHITE: Mr. Frawley, again I disagree with you. It cannot be for years and it cannot be forever.

MR. FRAWLEY: You are satisfied that the present situation cannot continue indefinitely?

MR. WHITE: Why, naturally.

MR. FRAWLEY: And if we find that it is continuing to continue indefinitely then we will have to go to Montreal; is that about the situation?

MR. WHITE: I am sure that is right.

MR. FRAWLEY: Mr. White, I am sure you will be glad to have me give you a calculation Mr. McKinnon made, and he has calculated Alberta's production dropped from last year to this year, 19 per cent?



MR. WHITE: Are you taking Western Canada industry, or Alberta?

MR. FRAWLEY: I thought your question was Alberta, and we took Alberta.

MR. WHITE: I think that is Western Canada.

MR. FRAWLEY: It is not all Alberta?

MR. WHITE: No, it is not.

MR. FRAWLEY: Now, Mr. White, there are two or three things I would like to clear up: would you turn to II-9 and II-10, where you have the table? The Chairman was asking you about this this morning.

Now, I put this to you, Mr. White, is it not a fact that because of shallower pay thicknesses in the United States and Canada it is necessary to drill more wells to obtain reasonable productibility and protect the reservoir? Do you agree with that?

MR. WHITE: One thing we should have done is put down the relative production in each country and make some sort of division because production in these countries is so different it is difficult to follow the line of reasoning you are quoting. Now, if you like we will do that for you. The fact of the matter is, and I am quite sure it is true, the development drilling in the North American Continent far exceeds any



foreign operation.

MR. FRAWLEY: Is there anything wrong with this proposition, that because of shallower pay thicknesses in the United States and Canada it is necessary to drill more wells to have more productibility and protect the reservoirs?

MR. WHITE: No, I would say because of non-productive wells it is true -- it may be because of shallower pay thicknesses, of course.

MR. FRAWLEY: Now, will you turn to page II-18 and there you are talking about the frequency of crown sales, and I would like to ask you a question on that. Is the frequency of crown sales not determined, (1) by the fact that oil under Crown reserve parcels in producing fields would be drained if sales were delayed?

MR. WHITE: I do not know.

MR. FRAWLEY: Well, have you no opinion about that?

MR. WHITE: Well, I could have this opinion, it depends on the mineral owner and if the Crown owns the parcel and it is draining, it is pretty difficult to see how the Crown loses anything.

MR. FRAWLEY: How about the value of it? Would you not lose?

MR. WHITE: Well, you had better sell the one that is being drilled and you would not lose



anything. This is all pretty hypothetical.

MR. FRAWLEY: Is it not so that applications by industry to have Crown parcels put up have been common?

MR. WHITE: I am sure you are right. I think both of us read into the record that this situation is only a year old -- that is the cutback in outlet -- and both the Alberta Government, I am sure, and certainly the industry, have only had that time to sort of examine what they are doing and the effects of it, so this observation is merely an observation based on past practice and the effect of those past practices. Industry may be as much to blame as anybody for it.

MR. FRAWLEY: Have you made any complaint to the Minister of Mines and Minerals in Alberta with respect to his Crown reserve policy?

MR. WHITE: No.

MR. FRAWLEY: I would like to say this at this point, Mr. Chairman: I think I should say it now, that if the Commission is seriously to take what I will call, and I think I can call, a very critical analysis of the oil administration in Alberta, both the Crown reserves and the administration of the Oil and Gas Conservation Board, then I would like the opportunity to file a reply. It may have been this was put into the Imperial brief in response to some questions by the Commission,



but I want to be quite certain and I will ask Mr. White now. Have you put all of this criticism -- I do not use the word offensively ---

THE CHAIRMAN: Would you ask me first?

MR. FRAWLEY: Yes, I should not have gone to the question until I had asked you.

THE CHAIRMAN: There was a great deal of discussion at our hearings in Calgary with respect to some of these matters and I really believe that Mr. White and his colleagues have stated what they have in their brief in answer to questions asked of the industry by our staff. Now, we have no desire to get into any kind of a critical analysis of the methods by which Alberta through its properly constituted Boards regulated production and marketing of oil. We do not consider that that comes specifically within our terms of reference. We consider that is good background material but we would need no reply, as I say, from the point of view of the Government, no rebuttal by Alberta, with respect to what is in Imperial Oil's brief in so far as it may or may not be critical of the policy in Alberta at this time.

MR. FRAWLEY: Thank you very much.

You did not put it in, by any chance, to sort of make the point that all this shut-back was of our own doing and all chargeable to our



own somewhat doubtful administration?

MR. WHITE: I have mentioned the question of reserves and made no complaint to the Minister, and I judge you are referring to the matters that I properly referred to as Conservation Board matters. I think our company has expressed these points of view before the Conservation Board in argument in the past so there is nothing new about them.

MR. FRAWLEY: Mr. Chairman, with respect to your last remark, I was very glad to have you say that you did not feel that you needed any reply from us. I assume, of course, that if we were willing to make a reply we would be quite free to do so?

THE CHAIRMAN: Of course, Mr. Frawley; no question about that.

MR. FRAWLEY: Thank you.

THE CHAIRMAN: I have no doubt that the Commission will be seeking information from Mr. McKinnon and his colleagues.

Mr. White, could we turn to page 31? I do not want to rehash this too far but there are two or three rather, shall I say, dogmatic statements and I think the Commission would like to get the benefit of your thinking a little further than it has been pursued in the brief.

On page 31, No. 2, export markets, the categorical statement was made under "A":



"It is not realistic to expect to
"secure both the Puget Sound and Montreal
"markets, at least in the near future."

Could you tell the Commission now why you vary your
formula on that matter?

MR. WHITE: Mr. Chairman, the very act
of securing the Montreal market would work against
any arrangement, if that is indeed possible, with
the United States Government to consider Canadian
crude as, in effect, under the same category as
American crude. In other words, eliminate that
bar to equity as determined. The reason for that
is, if you eject 250,000 barrels on the world mar-
ket I am sure the United States would be the re-
cipient of any complaint. That statement is
merely political in context and that is the reason
it was made.

THE CHAIRMAN: May I pursue that further
with you? I think you go on a little further in
the brief and say that 250,000 barrels per day would
be shut out of the Montreal market, Venezuelan crude
must find a home and you assume that that home would
be the Puget Sound area. Now, I personally at the
moment cannot follow that reasoning as to why that
displaced crude must find a home. Does it not
mean that Venezuelan crude production decreases by
that amount?

MR. WHITE: I think we are falling into a



trap of our own vocabulary; more properly that is what could have been said and that is what we mean.

THE CHAIRMAN: Perhaps you did; I am not quoting.

MR. WHITE: And the pressure will be thus on presumably the United States because Canada will take definitive action.





THE CHAIRMAN: I am wondering why you don't apply that argument to western Canadian crude and say that our land-locked Canadian crude should find a home. Why should it suffer in order to provide a home for Venezuelan crude?

MR. WHITE: You are talking about markets other than Montreal. I guess?

THE CHAIRMAN: Any market.

MR. WHITE: I don't see why it should suffer. Our suggestion is that, if at all possible, we shouldn't get in a row with the administration of states.

THE CHAIRMAN: Didn't you say this morning that you felt that the voluntary import quota in the United States was a temporary measure only?

MR. WHITE: Yes, I think that is so. I don't think it can keep on going the way it is.

THE CHAIRMAN: Then you say:

"Large potential markets for Canadian crude will exist in adjacent United States areas".
Now, those are potential markets.

MR. WHITE: They are potential, and very large, and I think you will see them referred to in Chart 4. There is quite a gap.

THE CHAIRMAN: Is there anyone in the oil industry in Canada today who can possibly say that those markets can be secured by Canadian crude?

MR. WHITE: If you will bring up the arrangement



we suggested in regard to the treatment of Canadian crude under quotas, I would be very optimistic that the use of Canadian crude would grow, both in the Puget Sound and in the Middle West, but I must admit that it depends on some such arrangement.

THE CHAIRMAN: And this continuity would depend on an even tighter arrangement.

MR. WHITE: I don't know quite what you mean.

THE CHAIRMAN: You, in your own brief, deal with the Montreal market and say that it is uncertain because political situations change.

MR. WHITE: The same arguments apply.

THE CHAIRMAN: Then you say -- now we will have to get to the Montreal market --

"If Canadian crude were to move to Montreal, the Montreal refiner would have to secure higher prices over the long run".

What do you mean by the words "over the long run"?

MR. WHITE: Higher-priced in the text means prices higher than would have to be charged where foreign crudes are refined in Montreal as opposed to Canadian crude brought down by this pipeline idea. I don't think it means necessarily higher than today. The gap you see growing is between the laid-down cost of foreign and Canadian crudes.

THE CHAIRMAN: Is the inference from your statement that the cost in Montreal of foreign crude



is going to decrease?

MR. WHITE: I think the inference is more probably in that direction than in the other direction, relatively. Also in our opinion one cannot lay Canadian crude down there today at the same price as foreign crude coming in. This being the case, this higher price would apply much sooner.

THE CHAIRMAN: Then this decrease in the price of foreign crude -- it is conceivable that it could be competitive with Western Canadian crude in the Montreal market.

MR. WHITE: It could. It is today almost. We cannot solve all the problems just one go-round, Mr. Borden. We are going to have to have changes.

THE CHAIRMAN: Then you get into the question of controls, and you speak of quotas, tariffs, subsidies or a combination, and you say:

"All of these devices limit or equalize competition".

Now, I concede that if you are referring to international competition a quota would certainly limit that type of competition because it excludes the foreign competitor from the market area.

MR. WHITE: That is basically our contention.

THE CHAIRMAN: You would not apply that statement, therefore, to competition within Canada within the industry itself?

MR. WHITE: Not a properly-arranged control.



There might be devices for doing that. But I think the importers and resellers who are not refiners --

THE CHAIRMAN: You are referring to the control of importers.

MR. WHITE: Yes, and this kind of complicated problem to see that they get enough oil, not too much and not too little. We could have complications of competition there, but that is the limitation you mentioned.

THE CHAIRMAN: Do you really feel that if Canadian crude did, under some arrangement, whatever it might be, go to Montreal, that would mean control right back to the wellhead?

MR. WHITE: Well, we believe that would be the ultimate end of it. Now, how long it would take, I don't know.

THE CHAIRMAN: You wouldn't say in terms of years?

MR. WHITE: No, I wouldn't like to do that. It is partly because we have lived under product control in British Columbia and Nova Scotia. It certainly affects the whole body. We would expect that would happen.

THE CHAIRMAN: By and large, I suppose the producer in Alberta would be willing to accept the lesser price for his crude at the wellhead in order to get this additional market.

MR. WHITE: It would depend on the producer.



There is quite a bit of evidence saying they would, but there is an equally interesting division which indicates that they are not quite sure of what they are saying. Some would actually lose, others would gain.

THE CHAIRMAN: But if the sale of crude from Alberta were on the same basis as it is today, namely, on the pro rationing system, then each producer would have to take that lesser amount would he not, lesser amount of dollars?

MR. WHITE: Oh, yes, he would have to go down in price, certainly. But let's take the example of a few wells producing at their present efficient rate. They wouldn't share in the volume that comes from the Montreal market, all they would do would take a lesser price for the same volume of oil because he couldn't take anymore.

THE CHAIRMAN: But he would have to sell it?

MR. WHITE: Yes, he would.

THE CHAIRMAN: So the price of Alberta crude could be made competitive in Montreal provided that the producer took and was offered only a lesser price for his crude?

MR. WHITE: I assume that that is what would happen; but there is quite a bit of testimony showing concern if that would materialize.

THE CHAIRMAN: I realize some of the testimony indicates there is a very slim margin.



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MR. WHITE: From the risk there is, yes.

THE CHAIRMAN: I think we will have a ten-minute break, gentlemen.

---A short recess.



MR. COMMISSIONER BRITNELL: I have just one or two questions. They are largely for clarification. I don't think any two are related. First, Mr. White, on page I-4: "Imperial cannot at this time justify assuming further heavy financial obligations for a new pipe line, which we are not convinced is economic, on top of those we already have in connection with Interprovincial and Trans Mountain." Am I right in assuming from that, and from the answers you have given to Mr. Pattillo and Mr. Frawley, that Imperial Oil would not be prepared to sign either throughput agreements or deficiency agreements on any pipe line to Montreal at the present time.

MR. WHITE: I think that is correct at the present time, Mr. Britnell. The key word is "which we are not convinced is economic".

MR. COMMISSIONER BRITNELL: Thank you. At the bottom of the page "(d) The question of foreign ownership is not limited solely to integrated companies."

MR. WHITE: That is strictly a dirty jibe.

MR. COMMISSIONER BRITNELL: I rather thought it might be. The next reference is "Brown land policy". I probably should know that from my homework in Calgary. I wonder if you would clarify that.



MR. WHITE: It should read Crown.

MR. FRAWLEY: Nothing to do with the
pipe line!

MR. COMMISSIONER BRITNELL: Now the
table at II-10. I know it gives further supple-
mentary information. What would you say is the
average Canadian production per well at the
present time?

MR. WHITE: It is in our brief. Just
a moment, Mr. Britnell, and we will get it. It is
embarrassing. We should have that at the tip of
our tongue. I think it is 220 barrels. It is
in here some place. I might add, Mr. Britnell,
I am quite unhappy about this table. Too many
factors bearing on it. I think we can add to
that total production country, total production
per well, and see if what we intended to prove is
an exact fact. I think it is.

MR. COMMISSIONER BRITNELL: I am happy
that you say you are unhappy. I was unhappy about
a number of factors that would seem to have to go
along with it.

MR. WHITE: We can either improve that
table or delete it.

MR. COMMISSIONER BRITNELL: That will be
quite satisfactory. Now my final point is in
relation to number III, page 6. I believe it is
the table that Mr. Frawley showed some interest in,



the estimated demand for Canadian crude. I had wondered before Mr. Frawley had anything to say about it, I couldn't quite make out from the text whether the difference between the Conservation Board projections even for 1959 - - these projections have just about doubled approximately the Conservation Board projections or estimates. I wondered whether your estimate assumed any positive steps being taken, say, for 1959.

MR. WHITE: Well, this is the so-called immediate case. The first submission we made is the recommendation to get the companies together under Government auspices to see what could be done in Ontario. The second one is relating to clarification of the United States import policy with relation to Canadian crude.

MR. COMMISSIONER BRITNELL: That is for 1959 you would hope there may be some chance for having those steps taken.

MR. WHITE: They have to be taken in 1959 or they are not going to be taken. That is about the size of it.

MR. COMMISSIONER BRITNELL: That would explain to some extent the difference between the two sets of tables. Thank you very much, Mr. White. That is all I have.

MR. COMMISSIONER HOWLAND: I have a couple of questions for Mr. White. I think Mr. McKenzie



might answer one of them in regard to the projection of the Conservation Board. On the table following the little chart there I am very glad to see that the Conservation Board forecast some projection of oil in the Maritime Provinces. I would wonder whether Imperial Oil, who are doing a lot of drilling down there, would rather agree with that formula? This is one time I would like you to agree with the Conservation Board.

MR. McKENZIE: There is a sedimentary basin in the Gulf of St. Lawrence and the sedimentary section is underlying some parts of Cape Breton Island, the Nova Scotia mainland and New Brunswick and Prince Edward Island. There are quite a few surface manifestations of oil and gas, seepages, oil shales, in that general area. However, I don't believe there is too much prospect for very much production in the very fringe of the basin where the sediments are thin. What is unknown is the prospects in the table part of the basin where the sediments might be thick. This is the area of the unknown that we are exploring and putting our hopes on.

THE CHAIRMAN: Mr. White, I am sure Doctor Howland would be agreeable to limiting that question to any information which might be made public with regard to the industry itself and their own activities in the Maritime Provinces.



MR. WHITE: Thank you very much, Mr. Chairman.

MR. COMMISSIONER HOWLAND: That is all I wanted to get, whether you feel a little optimistic or not.

MR. McKENZIE: To put it very quickly we have now concluded one test in Prince Edward Island. It was a dry hole. We are not discouraged. We are going to drill a second. If one had to guess I don't believe I would change the figures of the Conservation Board.

MR. COMMISSIONER HOWLAND: On that chart I have not had an opportunity of comparing your figures with the Conservation Board. I don't know whether you have either. They have a dotted line there at percentage due to optimistic estimate of export markets. Does your estimate of export markets differ substantially from their optimistic one.

MR. WHITE: Yes, if you are going to be optimistic you will have a substantial outlet of crude in the export market. I think their optimistic figure is much less than we would put in under similar circumstances.

MR. COMMISSIONER HOWLAND: As I take the chart and project it on a straight line basis beyond 1965, which I know is a dangerous practice, on that basis if you project the Alberta Conservation



Board's figures, even taking their optimistic export markets, and project that for the next even ten years it is almost ten years before that optimistic export figure would catch up with what they estimate the growth for Canadian crude would be if you add Montreal market to the present market.

MR. WHITE: We have in the first submission a curve which indicates that. That, I think, is the intermediate case on page III-6. Our percentage of production and producibility is about 60 per cent, or a little better, for a similar period. That, of course, is for western Canada and this is for Alberta so there is a little difference.

MR. COMMISSIONER HOWLAND: My recollection of your intermediate figure was that you did not seem to feel that the addition, the Montreal pipe line addition to the Montreal market for Alberta crude, would effect too seriously the growth of the Puget Sound area. I think it was 50,000 barrels a day less than if you did not have the market. Do you adhere to that or feel subsequently it would be a bigger cut back.

MR. WHITE: Well, it would probably be a bigger figure than that. It is anybody's guess. We don't know. Some major portion of the Puget Sound market we feel would be lost should the Montreal market be secured by means mentioned.



MR. COMMISSIONER HOWLAND: There was that one other point. In discussion with the Chairman you mentioned, on the possibility of any chance of crude, there would be a drop of imported price in Montreal?

MR. WHITE: I think the force of competition would seem to lead to that conclusion.

MR. COMMISSIONER HOWLAND: Well, are your general theses on the growth of the Canadian market based on expansion from Toronto towards Montreal -- an eastward movement?

MR. WHITE: Yes, an eastward movement from the Sarnia/Toronto complex towards Montreal.

MR. COMMISSIONER HOWLAND: What I am a little concerned about is that if you have a drop in the price of crude in Montreal will that not set back this kind of expansion?

MR. WHITE: We will have different circumstances then. We won't have talk of protection or duty; because so much of that is speculation down the road. A very small setback would be necessary under certain circumstances, but it would not be a major factor.

MR. COMMISSIONER HOWLAND: But your present break-even point is pretty close to being in Toronto right now?

MR. WHITE: Yes, it is.

MR. COMMISSIONER HOWLAND: Well, let us



have a ten-cent drop in the price of crude. Would that not make it pretty impracticable to carry on with this proposed expansion towards Montreal?

MR. WHITE: Yes, I think it would tend to make it more difficult. It depends on the pressures that are applied to the utilization of Canadian markets and the supply in Toronto from Western Canada; because there is something in the order of forty, fifty or sixty thousand barrels coming from Montreal now, and it is just possible that such a meeting as we talked about would tend to make that take place.

MR. COMMISSIONER HOWLAND: And I suppose that B. P. and Maritime new industries would put the pressure on, too?

MR. WHITE: Yes; every pressure there is.

MR. COMMISSIONER HOWLAND: Thank you.

MR. WHITE: Mr. Cogan does raise a question having some interest. Should you transport something of the order of 50,000 or 60,000 barrels a day to the eastward through, let us say, the Interprovincial system, it is quite obvious you would have a saving in pipe line tariff which would offset the 10-cent figure you have mentioned.

MR. COMMISSIONER HOWLAND: Well, that really confused me a little bit, because at one point, in reply to counsel, I think you said refinery



economics were the factor. It could be pipe line and production economics added to the refinery?

MR. WHITE: Before that we must consider the raw material which gets in there.

MR. COMMISSIONER HOWLAND: And by way of clarification, for my information again, this is economic, not commercial preference?

MR. WHITE: No; commercial preference is not in this at all. This is economics we are talking about.

MR. COMMISSIONER HOWLAND: All right.

THE CHAIRMAN: Thank you very much indeed, Mr. White, to you and your colleagues for the supplemental brief which you have presented as well as for the assistance which the testimony of yourself and your colleagues will give to the Commission.

I know that a great deal of work has been put into the preparation of this and we are very grateful.

I believe that we have Dr. Jackson and that you wish to call him to make a statement.

MR. WHITE: Yes.

Before introducing Mr. Jackson -- Dr. Jackson -- I have one or two things which I might add -- we are late now, and we might as well be a few minutes later -- in trying to show the factors that bear on this problem, and the only



summary I might try to make is that our company is opposed to the Montreal market as such. We do not see how to get it. We are afraid the consumers' interest would be affected by such a proposition.

We have suggested, and suggest again, that a meeting be convened to discuss the Ontario situation.

There is one little sidelight I would like to present before the Commission. There has been some impression that we did not like the land tenure system, were rather at odds with the Alberta Government and didn't think much of the Conservation Board. The land tenure system is a development over a period of time. I don't know how one can change it. It is like changing one's wife -- only you can't always fix it!

With respect to the Conservation Board, I would like to pay a public tribute to its devoted, dedicated Chairman, Mr. Ian McKinnon. The Conservation Board has done extremely well over a long period of time. Any comments we have made were related to objections to the system and how it works. I think it is to the interest of all industry to recognize problems when they see them and mention them.

So I hope -- and I am speaking particularly to the gentlemen at that table -- I hope no impression has been created which is at all



contrary to what I have just said.

THE CHAIRMAN: Thank you, Mr. White.

MR. WHITE: Mr. Jackson very kindly undertook to apply an accountant's eye to possibly some of the controls that might be necessary and to what things should be controlled in the general economy of the industry.

In his own words he will give you his terms of reference on those **basic things** and his estimate of what would be necessary.

We appreciate very much his doing this for us.

Dr. Jackson.

THE CHAIRMAN: I think Mr. Pattillo probably wishes to mark your submission as an exhibit, Dr. Jackson.

MR. PATTILLO: Yes, I would; and I would like to have it marked T-8-1.

---EXHIBIT NO. T-8-1: Submission by Mr. Gilbert Jackson.

MR. FRAWLEY: I don't know, but I understood from what Mr. White said that it might have something to say about the things which Imperial Oil spoke about, and I would be grateful to receive a copy.

THE CHAIRMAN: Has a copy been denied you, Mr. Frawley? We will rectify that.



MR. FRAWLEY: No. Mr. Lafrance has very kindly given me his copy, but I don't know why Mr. Lafrance should be deprived of it.

THE CHAIRMAN: I am sure that extra copies are available.

All right, Dr. Jackson, please proceed.

MR. JACKSON: Thank you, sir. May I begin by making one correction for the record. In spite of three repetitions of the title I am not a doctor.

I should elaborate that by saying -- by confessing -- that I know nothing about oil, and that I come here in that knowledge to discharge a task which has no special relationship with oil, if you will allow me to do so.

What I have tried to do hastily, and very inadequately, is to think about the place of public policy in dealing with the needs of any domestic industry which, for any reason which seems good to it, would like assistance from the State.

That, shortly, is, perhaps, what this insufficient submission of mine is directed to.

1. There is a general presumption that if labour and capital are left free to find the various channels of economic activity which have the strongest natural attractions for them, their exercise of such freedom will tend to bring about a larger production of goods and services over-all,



for the community, than would be brought about otherwise; and will tend so to distribute our productive energies among different industries, that the various kinds of goods and services which are produced, will reflect approximately the relative urgencies of desire by consumers, for each of these goods and services.



2. Exercise of such freedom in the distribution of labour and capital among the various channels of production, tends furthermore to provide the consumers of these goods and services with a maximum of comfort, ease and enjoyment.
3. Interference with such freedom, which is intended to distribute labour and capital among these channels on another and a different basis thus is likely to prevent consumers from obtaining the maximum of comfort, ease and enjoyment, which they might otherwise enjoy.
4. Therefore we should recognize forthwith another general presumption: that unless in a given instance, there may be present some special, compelling reason to the contrary, labour and capital should be left free to find, and to distribute themselves among the various channels of economic activity, which have the strongest natural attractions for them.

Only thus can we maximize the production of goods and services in our national economy.

5. Instead of being welcomed vociferously when it was first propounded, for awhile the line of reasoning set forth here in greatly simplified form, encountered strong opposition. Not until mid-nineteenth century did these two presumptions gain widespread support. Thereafter, when at last the teaching of Adam Smith, Jeremy Bentham, Frederic Bastiat and Mill prevailed, the growth of markets and improvement in the living standard of mankind,



were almost instantaneous.

Indeed, the destruction then of regulation which had been discouraging or encouraging artificially the production of certain goods and services (and so, diverting labour and capital from the channels to which they would have been attracted naturally) may have done as much, during the nineteenth century, to raise the living standard and the comfort of Western Man, as was done simultaneously by the great discoveries in physical science, then being published.

6. But many such regulations remain. To that extent, economic enterprise still is not free.

7. Men still respond to the same stimulus which donkeys obey: though the form of that stimulus varies occasionally.

Nowadays the carrot is made to look like a business opportunity created artificially.

This may be done by means of a tariff on goods imported; by means of a subsidy paid to the domestic producers of something; or a contribution to the freight charged for bringing to market goods produced at home; or else, use of the credit of the State for the benefit of private persons, eager to raise money from the capital market at rates of interest, which their own credit rating would certainly not justify.

Nowadays, the stick is made to look like a sumptuary tax or perhaps, a law forbidding production

THE UNIVERSITY OF CHICAGO

PHYSICS DEPARTMENT

1955-56

PHYSICS 301

LECTURE NOTES

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or forbidding importation for sale in the domestic markets of something solid or liquid, the consumption of which (in the domestic market, or perhaps in some designated corner of it) is viewed for the time being, with disfavour.

8. Always a relentless opponent of the carrot and the stick as implements for use on humans, Adam Smith declared nevertheless, nearly two centuries ago, that there is at least one valid reason for interference by the State with the freedom of labour and capital, to seek and exploit the most profitable opportunities which they can find.

In eight famous words he declared:

"Defence is of much more importance than opulence". Therefore let the citizens of any country get the wherewithal necessary to defend themselves against attack from abroad: no matter what opportunities in business they will have to sacrifice thereby.

In fact the maxim is valid not in one, but in two directions at the same time, There is a general presumption that the more we now can enlarge the present capacity to produce goods in general, of our own economy, the more adequate in general, will be the means of defence which we probably can procure for ourselves in an emergency. (But let us note also, there are exceptions to the presumption -- certain "defence" industries which in time of peace normally cannot meet competition



from abroad and live vigorously.-- but which are vital in time of war against the Queen's enemies and therefore, need somehow to be kept active and efficient in time of peace -- ready to perform promptly the role which, in time of active warfare or immediately thereafter, is the vital purpose of their existence! Here is the concrete embodiment of Smith's dictum, that defence is of more importance than opulence.)

9. Are there other national needs, less urgent than our absolute need for defence but urgent enough to render plausible certain claims for the direction of labour and capital into channels of economic activity, which in themselves have not a very strong natural attraction for manpower and money?

The building of the C.P.R. Transcontinental between 1881 and 1886; the creation during the past five years, of a complete and self-contained Canadian aircraft industry; the construction of the St. Lawrence Seaway -- these may be cited as examples of such claims. Each involved so great an initial expenditure as to make participation by the State essential before the project could even be launched.

Each was of tremendous economic importance. But we should note, each is tied intimately to the requirements of Canadian, or of North American defence: the supporters of each (while doubtless using words more modern than those of Adam Smith) thus could plead the "Smithian argument", quoted above, for their



costly proposals.

10. Superficially different, but similar in principle are the claims advanced not infrequently for support by the State of certain local industries in Canada, to prevent certain portions of our domestic territory from becoming de-populated.

Canada's copious records of argument round and about such claims doubtless would be more helpful to the Members of this Royal Commission, if the political and economic issues which these claims inevitably rouse, had not become entwined with one another inextricably, so long ago.

Most such claims have been made for obvious reasons, on behalf of one or more sections of the Maritime Provinces.

11. The Royal Commission on Canada's Economic Prospects, having compared with one another the difficulties and amenities of life in these Provinces, then stated (Preliminary Report, December 1956, p. 99):

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".... the fact remains that living standards are lower in the Atlantic Provinces than they are in the rest of Canada, and that it is in everyone's interest to reduce this differential if it is at all possible to do so."

It has been pleaded before this Commission that imports of oil from abroad into Quebec should be restricted for the benefit of Albertans who produce oil. Implied appears to be the suggestion that imports of oil from abroad into the Maritime Provinces might also need to be restricted.

Admittedly, the threat of de-population does not overhang Alberta.

Nevertheless, to plead that certain markets for oil in Eastern Canada should be restricted for the benefit of persons producing oil in Alberta, may be thought to smack somewhat of the claim of Lazarus, for crumbs underneath the Rich Man's table.

The relative positions at the present time, of the various interested parties, may be seen below:

(a) Growth of Population

(1947-1957)

Alberta	41%
CANADA	32%
Quebec	28%
Maritime Provinces	14%
(excl. Nfld.)	

Source: The Canadian Statistical Review, Table 4.

(b) Increase of "Industrial Employment"

(1947-1957)

Alberta	73%
CANADA	28%
Quebec	25%
Maritime Provinces	11%
(excl. Nfld.)	

Source: D.B.S. Review of Employment and Payrolls,
Table 3.

(c) Personal Income Per Person

(1956 - the latest year of record:
averages in current dollars.)

Alberta	\$1,418
CANADA	1,365
Quebec	1,172
Maritime Provinces	948
(excl. Nfld.)	

Source: National Accounts, Income and
Expenditure, 1926-56, Table 29.

12. The specific claim now before this Royal Commission, that import of oil into Quebec and the Maritime Provinces ought to be restricted deliberately by Government, has been defended on yet another ground: that in part at least, the Canadian market for Canadian oil can be made an assured market by the simple process of making it a "captive" market: whereas a market abroad for Canadian oil might be closed against us, without warning, as a result of unilateral action by some foreign government. To quote one witness - Mr. R. A. Brown, who we heard yesterday.



"Even if we get a U.S. market, we can never be sure that it is a secure market, whereas we can be sure of Canadian markets".

(Evidence by Mr. R. A. Brown Jr. - Transcript, page 4115.)

It may be said parenthetically that if these arguments were advanced in favour of all Canadian producers partly dependent on markets abroad for the disposal of whatever they produce, for whom a substantial "captive" market could be provided in Canada by restricting the freedom of Canadian consumers to purchase imports, many Canadian producers could speak with equal force, and would be as eager to get a captive market in this country.

But if all of these arguments, being equally valid (or invalid, as the case may be), were accepted; and if in each case action were to be taken accordingly; much of Canada's external trade (imports as well as well as exports) in a vast range of products would thereby be destroyed. I will repeat the statement in my third paragraph that the net result would be to reduce the supply of goods or services and the ease and comfort of the people of Canada as a whole.

13. Whether or not "all roads lead to Rome", it seems that all the roads in this discussion bring



us back to the so-called "defence arguments".

There is a restrictive proposal before this Commission, whose execution will admittedly cause (at least in time of peace), a less economical use of Canada's aggregate resources of labour and capital, than would be secured if there were to be no such restriction.

This contention does not require proof. If Canadian labour and capital, diverted to the construction and operation of a pipe line for bringing Albertan oil to Montreal, would not involve a certain amount of economic waste, the champions of such a pipe line would not have come to this Commission, asking for restrictions on the free choice of oil by Canadian consumers, as a means of achieving the construction of their pipe line. In that connection, these paragraphs were written some time ago but I should like to refer you to page 4 of Mr. Brown's statement before the Commission yesterday afternoon in which he says; "We realize that our proposal requires some form of Government support".

But if the crucial argument is really the "defence argument", no plea that Albertan oil brought eastward by pipe line would be displacing oil which might have been secured less expensively from abroad, can be regarded as conclusive: defence is still of much more importance than



opulence.

14. The submission made by Mr. Brown on behalf of Home Oil and a number of other Canadian companies does not actually mention the word "defence"; and speaks of "security" no more than once.

That submission is concerned, not so much with the position which would confront us if in a Third World War, packs of enemy submarines and flights of enemy bombers were to be seeking out our convoys, and sinking our ships in great numbers: including of course, the tankers bringing us oil from abroad. It is much more concerned with dangers to the peaceful shipment of oil by sea, which would result from civil or international war in the Near East, or in South America.

The danger exists. An economist cannot assess the consequences for us of such an interruption. These are outside his professional scope as an economist.

At this point, either he must retire from the discussion -- or else fall back on his own assessment of the terrible threat to peace which has beset us for so long, and will certainly continue to beset us.

15. Speaking simply for myself -- but after looking for half a lifetime at this threat -- with respect I submit the following:



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During at least the past three decades (and as far ahead of us as we can scrutinise the future) a new kind of threat is directed against civilisation.

This new threat is not fortuitous, nor is it likely to materialise fortuitously from events. It is part of an organised plan, conceived in two stages.



The first is the progressive weakening of civilization: by civil war (as in Korea); colonial rebellion (as in Algeria); the paralysis of industry by strikes (best of all in breach of contract and without notice, as in London recently); planned provocations to violence in labour disputes (as in many recent strikes on this continent); and the deliberate subversion of loyalty, faith and morals generally, now so plainly to be seen everywhere.

These activities take advantage of the fact that civilized nations are inter-dependent in trade, especially for foodstuffs and fuel. To destroy beliefs which keep man civilized, and at the same time to de-vitalize the world market on which all of us depend for key necessities of life: these are the logical preparations for a Third World War.

16. There is no doubt that interruption of oil supplies to North America from the Near East (doubtless as well, of oil supplies to North America from South America) form part of this deadly programme. If and when the stage is reached at which civilization has been weakened sufficiently (when, in a familiar "sporting" illustration, the neck muscles of the bull have been made to droop sufficiently), then all will be ready for launching World War III. Then and only then, will come out Hour of Truth.

Thus it is the "defence" argument in its most naked form, with which Members of the Commission



are now confronted. We cannot consider it otherwise than as part of World War III.

17. Strategists accepted long ago the maxim that the defence of the North American continent constitutes a single problem -- not a series of discrete problems. It seems likely that so far as our Joint Chiefs of Staff are concerned with the needs of the North American Continent in war time for energy, they look at problems arising in different parts of the Continent, as being simply portions of the much larger supply problem which they face, overall.

The question whether oil could reach Montreal during the next World War depends on much the same considerations, as the question whether oil could then reach ports in the North Atlantic or ports in the Caribbean.

If it were to be concluded that in such a war (whether as the result of submarine action or otherwise) the North American continent is likely to be made dependent on domestic supplies of oil, such a conclusion will obviously govern the planning of oil deliveries, everywhere in North America. The distribution of oil would then be planned on a continental scale. But if it is concluded, on the contrary, that North America can reasonably look for a continuance of oil deliveries by sea, such deliveries could probably be made with no more difficulty to Montreal than to North American ports elsewhere.



18. These two considerations (first, that the problem of defence is of much more importance than has appeared in the submission of Mr. Brown: second, that we really face not a local threat to the fuel supplies of four Canadian provinces, but a comprehensive threat to the fuel supplies of the North American continent), lead me to suggest to the Members of this Commission that before deciding against, or in favour of the claim now before them, that import of oil into Quebec and these three Maritime Provinces should be restricted deliberately by Government, they should ask the Joint Chiefs of Staff, in due form, for an exhaustive discussion of the proposal in its strategic aspect (and of course, in secret).

The members of the Commission would, no doubt, be guided subsequently, by the results of that discussion.

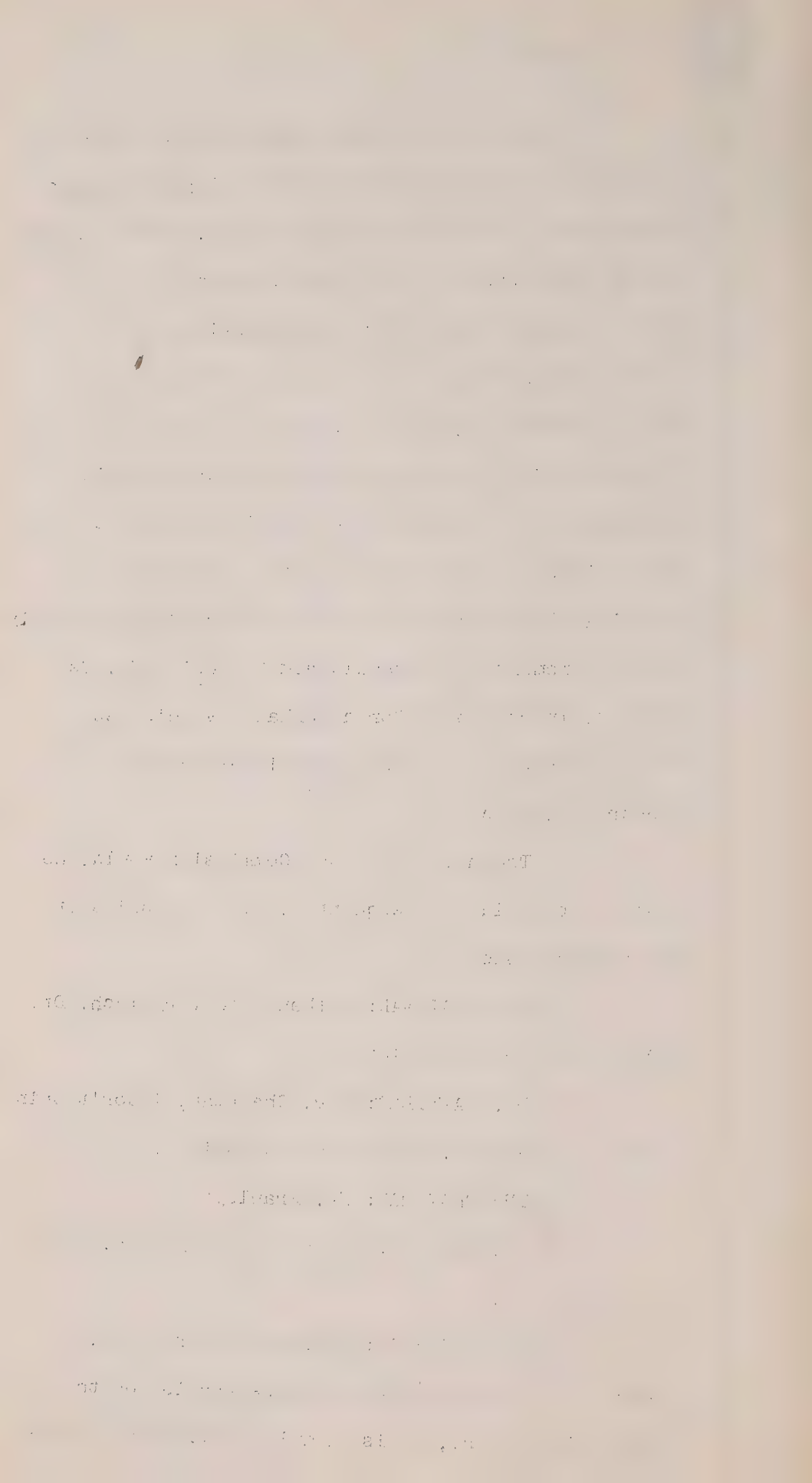
THE CHAIRMAN: Thank you very much, Dr. Jackson. Mr. Pattillo?

MR. PATTILLO: Mr. Chairman, I don't think I wish to ask Mr. Jackson any questions.

THE CHAIRMAN: Mr. Frawley?

MR. FRAWLEY: Thank you very much. I have no questions.

THE CHAIRMAN: Thank you very much, Dr. Jackson, for giving us this dissertation on the economic picture, it is very helpful. Thank you, sir.





Now, what does counsel propose we do?
I know that British American Oil is next on our
list. Have you discussed the matter with B.A. Oil,
Mr. Pattillo?

MR. PATTILLO: No, I haven't, I am afraid,
Mr. Chairman, because I thought probably we would
be busy for the rest of the afternoon, and we have,
and I do know Mr. Loughney has been here.

THE CHAIRMAN: Well, gentlemen, we
propose to adjourn the hearing until tomorrow
morning, if that is satisfactory to you, Mr. Loughney.

MR. LOUGHNEY: Yes, sir.

THE CHAIRMAN: We will meet again tomorrow
morning in this room at 10.00 a.m. The hearing is
now adjourned.

---Whereupon the hearing was adjourned 4.35 p.m.,
to resume at 10.00 a.m., Wednesday, July 9, 1958.

